

## LITERATURE OF MANUFACTURERS

Catalogues, bulletins and other direct advertising material recently issued.

Manufacturers are requested to send copies of new trade literature promptly to Electric Refrigeration News.

### Borden

The Borden Co., Warren, Ohio, has published a leaflet describing two new Beaver die stock models—No. 8, plain, and No. 8R, ratchet. These new Beaver tools use a separate set of dies for each size pipe. Instead of loose bushings, the die stocks have the advantage of a self-contained rear-end.

### Iceberg

Five electric water cooler models are illustrated in a folder issued by the Iceberg Mfg. Co., Gardner, Mass. Two of the five coolers, Models No. 100A and No. 100C, are equipped with compartments for freezing ice cubes; these models also have bottle beverage storage compartments. The other three coolers illustrated are Models 100B, 100D and 100E.

### Spear

Self-contained electric water coolers are described in a folder of the James Spear Stove & Heating Co., 9th and Samson Sts., Philadelphia, Pa. These coolers are equipped with a Spear ice water generator and a Copeland compressor. They are offered in 16 models. The cabinets are finished in a variety of colors. Storage capacity ranges from 3 to 8 gallons.

## BIG GROUP OF WALKER MEN COMING TO DETROIT

Toledo, O.—E. H. Walker, Frigidaire distributor for thirty-two counties in Ohio, Michigan, and Indiana, reports that 150 delegates will attend the regional convention to be held in Detroit February 4. They will travel in a private train, and will be quartered at the Book-Cadillac Hotel after arriving in Detroit.

Before leaving it is planned to hold "open house" at the E. H. Walker Co. Special arrangements for a reception of dealers and salesmen have been made. The private train, which will carry the delegates to Detroit, will leave from the Walker company's private switch.

Mr. Walker will endeavor to have next year's regional convention held here.

## TEMPRITE COOLERS FOR ENGLISH RESTAURANTS

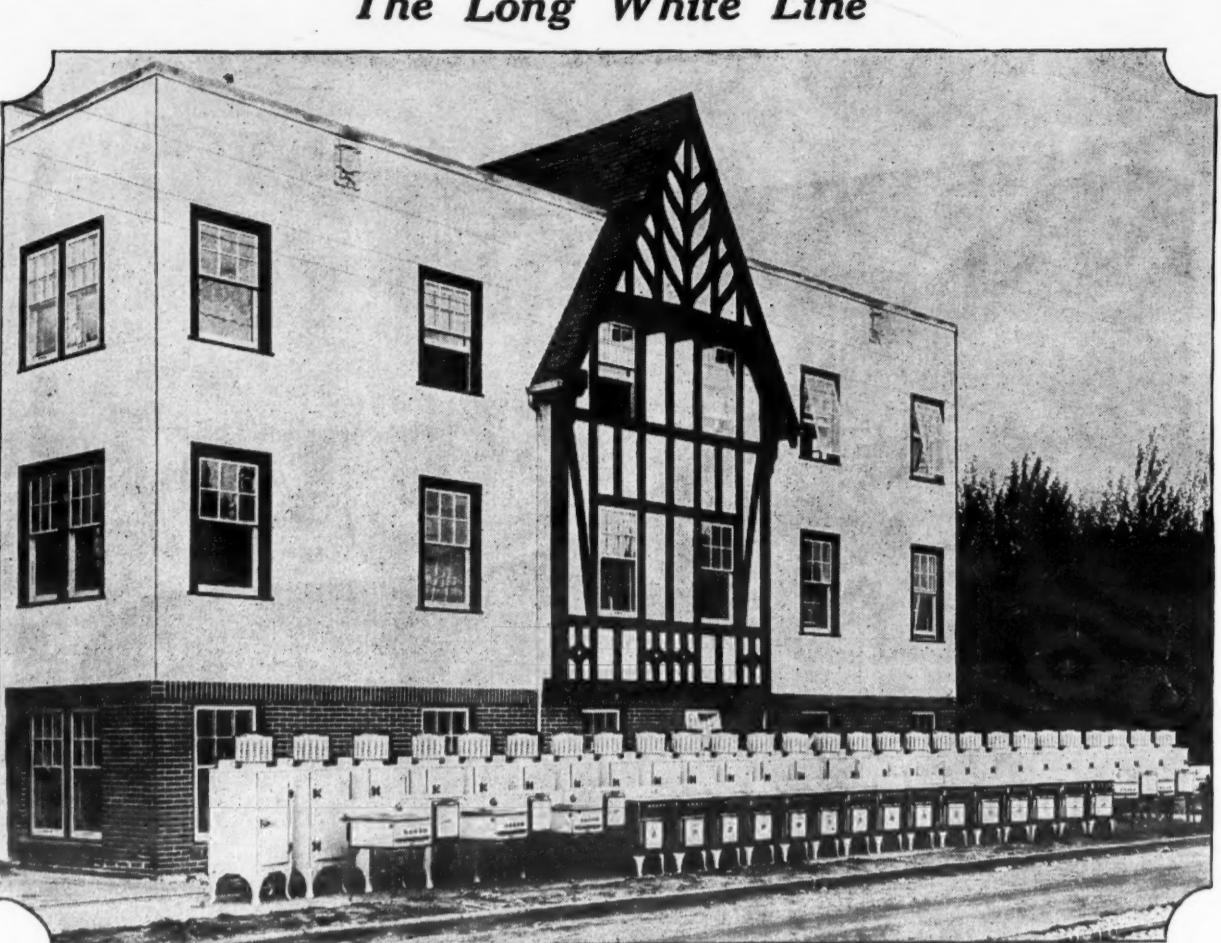
Detroit, Mich.—The Liquid Cooler Corporation reports an initial order for twenty-five units from an English concern which owns and operates, in and about London, some two hundred and fifty restaurants.

The Temprite units supplied on this order are standard 65-B-2 Models, a type designed to cool two separate liquids. It is expected that these units will be used for cooling water for the restaurant use, and draft beverage.

This concern soon expects to equip its entire chain of restaurants with Temprite cooling units.

## WALTHALL NOW IN CHARGE SOUTHEAST G. E. SALES

Atlanta, Ga.—B. M. Walthall, formerly mid-west representative for the Electric Refrigeration Department of the General Electric Company, has been appointed Southeastern district manager, succeeding L. W. Driscoll. He will make his headquarters in Atlanta.



Thirty model G-40 General Electric refrigerators and thirty Hotpoint ranges, in front of Barnhart Apartments, Calgary, Alberta Canada, where they were later installed.

## REQUESTS FOR INFORMATION

Readers who can assist in furnishing correct answers to inquiries, or who can supply additional information, are invited to address Electric Refrigeration News, referring to the query number.

### Neware Co.

Query No. 338—Do you have the address and any information concerning the equipment manufactured by the Neware Co.? We understand they manufacture air-cooling systems for theatres.

### Progress

Query No. 339—"I am desirous of obtaining, if possible, information relating to the progress being made by mechanical refrigeration and the extent to which manufacturers of the ice chest, which has been in use for so many years, are meeting the competition.

"Are there any statistics available which will show the number of mechanical refrigerators and regular ice chests which are produced annually? Also, is there any information available showing the extent to which the installation of central refrigerating plants in apartment houses is affecting the sale of unit refrigerators?"

### Ice Industry

Query No. 340—"Up until recently, I have assumed that the ice manufacturer's business has been even on the increase, by virtue of his increased effort to obtain new customers and the improved methods of distribution which he has in recent years adopted.

"However, I have recently heard of a difference of opinion regarding the ice manufacturer's business volume today; that is to say, I have been told that the

ice manufacturer's business is now on the decline.

"Have you any information concerning the ice manufacturer's volume during 1928 and 1929? Furthermore, have you any information regarding the tendency of their business at this particular time with regard to their volume on comparative dates last year and the year before?"

### Essay Contest

Query No. 341—"Can you give me the results of the Essay Contest of the National Food Preservation Society held during the month of September last? I have watched for publication of the results, but so far have not seen them.

"I would like to get the winning essays, if possible, now that I can use such data. At the time of the contest, however, I was with an automotive jobber, so my contribution was in line."

**Answer**—Winners of the principal prizes in the National Food Preservation Essay Contest were announced in the December 18th issue of ELECTRIC REFRIGERATION NEWS. A double page spread advertisement in the December 19th issue of the Saturday Evening Post gave the complete list of winners.

### Coats and Unionalls

Query No. 342—"Can you give me the names and addresses of some companies making caps, coats and unionalls with trade names?"

### Interested in American Units

Query No. 343—"I have read your magazine with a great deal of interest and as you note from the attached letter, I have ordered one year's subscription of same. My company was established in 1894 and consequently we have been doing business over a period of 35 years. We manufacture mainly machines for large hotel kitchens, sanatoriums, and hospitals. Also machines for bakeries, pastry shops.

"For about three years I have engaged in the sale and manufacture of refrigerators. I have installed many machines connected with the A. S. Automatic of the firm, Brown Bovari Works, Mannheim, Germany. For two years I have sold American compressors. I am, of course, also interested in the distribution of similar products, and invite all American manufacturers of such goods to submit their propositions and quotations."

### Tubing

Query No. 344—"We have had inquiries from time to time of late from concerns inquiring for tubing with extended radiating surface of steel. Some concerns are inquiring for a tube equal in size to 1 1/4 inch pipe, and others for a tube equal to 3/4 inch pipe."

### Isobutane

Query No. 345—"Can you give us information as to where we can purchase isobutane for refrigerating purposes and what quantities it can be bought in?"

**Answer**—Isobutane can be purchased from The Carbide & Carbon Chemical Corporation, 30 E. 42nd St., New York.

## Subscription Order

ELECTRIC REFRIGERATION NEWS  
550 MACCAEES BUILDING, DETROIT, MICH.

Please enter subscription to Electric Refrigeration News.

United States and Possessions:

\$2.00 per year.  Three years for \$5.00

All other Countries:

\$2.25 per year.  Two years for \$4.00

I am enclosing payment in the form of  
 Check  P. O. Order  Cash

Name.....

Street Address.....

City and State.....

Remarks.....

## The Long White Line

## THE CONDENSER

ADVERTISING RATE fifty cents per line (this column only).

**SPECIAL RATE** if paid in advance—Positions Wanted—fifty words or less, one insertion \$2.00, additional words four cents each. Three insertions \$5.00, additional words ten cents each. All other classifications—fifty words or less, one insertion \$3.00, additional words six cents each. Three insertions \$8.00, additional words sixteen cents each.

### POSITIONS AVAILABLE

**WANTED**—Experienced servicemen on methyl chloride and sulphur dioxide plants. Must have car. Wonderful future. Only A-1 men need apply. State experience. Salary depending on ability. Box 233.

**WANTED**—Experienced Frigidaire salesmen, 4 household and 2 commercial. Account of warm climate and tourist business this is our best sales season. Address W. H. Forgy, Sales Manager, 102 E. Lafayette Street, Tampa, Florida.

LARGE manufacturer of refrigerator parts wants to get in touch with someone having valuable new ideas on household refrigeration systems and particularly on sealed unit systems. Box 232.

### POSITIONS WANTED

SEVEN years' experience, service man, service manager, commercial sales engineer and assistant to sales manager of national company. Thoroughly understands several units and qualified in dry expansion Larkin coils. Willing worker who will appreciate an opening where future is possible. Will be available April first or before. Eastern location preferred. Box 227.

**SERVICE MANAGER AVAILABLE**—Well seasoned, with years of experience. Former factory field man, and for the past years connected with a large manufacturer of mechanical cooled soda fountains and electric ice cream cabinets. Eastern vicinity preferred. Box 231.

### MISCELLANEOUS

**DEALERS** and distributors sell Gem Kitchen Mechanic, a mixer that will give real profits. The next big electrical major appliance retails \$115.00. Nationally advertised Good Housekeeping Magazine. Leads sent our distributors. We do not sell direct. Write for descriptive sales matter. Discounts, etc., Gem Appliance Company, 280 Madison Avenue, New York.

### Foreign Prospect

Query No. 345—"Would you be so good as to send me a list of the manufacturers of compressors, condensers and tanks for household and commercial installations suitable for export, using sulphur dioxide as refrigerant, together with any information on these products you may be able to give?"

**Answer**—See classified directory in January 1 issues of the NEWS.

### Compressors

Query No. 346—"Can you furnish the names of manufacturers who can supply compressors in quantity lots for assembly in self-contained cabinet models?"

### Dairy Units

Query No. 347—"In your issue of October 9, 1929, you had a long article on the use of small units in dairy applications. We are in a position to use or make these units and would like to have further particulars on them. Where can drawings and close specifications be obtained to cover their manufacture? We would rather buy them from the manufacturer."

### Trade Names

Query No. 348—"Can you advise us whether or not the name Duchess is in use on electric refrigerators and also whether the name "Ice Electric" is in use?"

**Answer**—The trade name "Icylelectric" is used by the Houston Icylelectric Co., Houston, Texas.

### Cold Storage Rooms

Query No. 349—"Please send us information concerning materials, construction and general principles used in hardening and egg storage rooms."

### Isobutane

Query No. 350—"Can you give us information as to where we can purchase isobutane for refrigerating purposes and what quantities it can be bought in?"

**Answer**—Isobutane can be purchased from The Carbide & Carbon Chemical Corporation, 30 E. 42nd St., New York.

## KING ZEERO SAFETY COOLING UNITS EVAPORATORS

for Single or Multiple, Methyl or Sulphur  
Over 3,000 in operation in Chicago, ranging  
from 1 to 106 per compressor

**BRINE**  
CIRCULATION UNITS, All Steel  
Tested 125 lbs air pressure

**MORRISON MFG. CO.**  
2315 Wolfram St., CHICAGO, ILL.

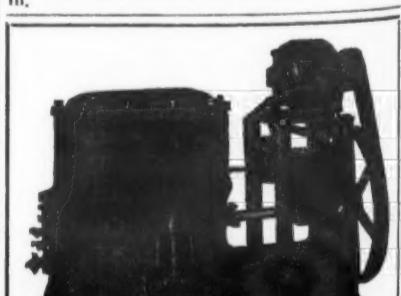
## FITTINGS - TUBING

Largest Stock in the East

**DOMESTIC UTILITIES**  
Division of the Refrigeration Corp. of Maryland  
ARLINGTON, BALTIMORE, MD.

**Be An EXPERT in ELECTRIC REFRIGERATION**

Learn at home new easy way. Oldest, largest best study electric refrigeration school offers thorough, complete training in all phases of refrigeration. Cools, Freezes, Freezes, Zeros, and other leading manufacturers. Wonderful pay-raising opportunity for service men; practical help to dealers, salesmen, manufacturers. Special proposition to firms who wish to train staffs. FREE BOOK explains everything. No obligation. Utilities Engineering Institute, Dept. 410, 4403 Sheridan Road, Chicago, Ill.



## Electric Refrigeration Distributors and Dealers

You need the PEERLESS line of compressors.

PEERLESS units give you a COMPLETE line, ranging from one to ten tons.

PEERLESS Perfected Multiple Apartment System is recognized leader in its field. Full details given on request. Our record warrants your most exacting investigation.

**PEERLESS ICE MACHINE CO.**  
515 W. 35th St.  
CHICAGO, ILLINOIS

# ELECTRIC REFRIGERATION NEWS

Registered U. S. Patent Office.

The business newspaper of the refrigeration industry

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TWO DOLLARS PER YEAR

## NEW WELSBACH UNIT HAS SEPARATE COIL FOR FREEZING CUBES

Leaves Necessary Moisture in Food  
Storage Compartment

An isolated compartment for the freezing of ice cubes and the resultant use in the food storage chambers of a cooling unit that never reaches sub-freezing temperatures, are the notable features of the new Welsbach refrigerator, which is called the Hydelectric. The Welsbach Company is planning a program of expansion for its Refrigerator Division. The factory at Gloucester, N. J., near Philadelphia, is being geared for production of the new domestic unit.

The compartment in which the ice cubes are frozen is at the top of the cabinet and is cut off from the rest of the cooling chamber by insulation. The ice cubes thus can be frozen without affecting the temperature of the rest of the interior. Below the ice cube chamber is a shallow finned cooling unit, which takes care of chilling the food. It is so regulated that it does not reach low temperatures and as a result no frost forms on it, and of course the foods in the storage chambers are permitted to retain their moisture. Defrosting also is rendered unnecessary.

Rapid freezing of cubes, due to the concentration of the work of the isolated freezing unit is another result of the new design.

In spaciousness, the Hydelectric models enjoy marked advantages owing to the small compass of the insulated ice-maker and the finned cooling unit. The new design also permits of full box width shelves.

The first of the Hydelectric models available for delivery is Model C2060, a refrigerator of about the same dimensions as normally associated with a

(Concluded on Page 2, Column 3)

## ENGINEERS PLAN WAYS TO TEST REFRIGERATORS

Detroit, Mich.—A thorough discussion of plans for testing and rating refrigerators occupied the members and guests of the Detroit Section of the American Society of Refrigeration Engineers at a meeting held in the Masonic Temple on February 3. The morning session was devoted to consideration of the proposed test code for ice refrigerators, prepared by an A. S. R. E. committee headed by C. F. Belshaw, and in the afternoon the possibilities of drafting a similar test code for mechanical refrigerators were discussed from practically every angle. Cabinet design was the subject of the short evening session which followed the dinner. Moving pictures of lumbering operations in Oregon concluded the evening's entertainment.

Interest in the codes was so keen that about thirty men from other cities attended the meeting, and contributed their views. The proposed code, presented at the morning meeting by Mr. Belshaw's committee, disclosed a sharp divergence of opinion among those present on a number of important points, one of them being the fixing of 80 degrees as the room temperature under which the tests should be conducted. Dr. C. F. Kayan, of the Mechanical Engineering Department of Columbia University, a member of the committee, presented an adverse minority report. C. C. Thomas, of the Kelvinator Company, who was in the chair, prolonged the session until long after the luncheon hour, in order that all the divergent views might be presented. Mr. Belshaw emphasized the fact that the proposed code was only a starting point; that it doubtless could and would be amended and improved as time goes on.

Glenn Muffy, president of the Detroit Section, was in the chair when the afternoon session began. He outlined the points to be discussed and called on various men present for talks on various phases of the subject. His outline of the subject follows:

1. Can we standardize mechanical refrigerator tests with ice box tests?
2. Range of room temperatures under which tests are to be made.
3. Inside temperatures at standard room temperatures.
4. Humidity control.
5. Load or no load.
6. Shall we use standard setting or adjust the standard tests?

(Concluded on Page 2, Column 5)



Keeping Vegetables Crisp is New Welsbach's Job

## TO RENEW CODE BATTLE ON THE CHICAGO FRONT

Chicago, Ill.—Renewal of the fight to secure a new refrigeration ordinance for the city of Chicago is promised for the last week in February, it has been announced by the Chicago Department of Health.

An armistice in the verbal hostilities which were waged before the Health Committee of the Chicago City Council some months ago was declared, when the city went broke and the aldermen had too many worries of their own to consider the relative merits of five-pound limits, outside vents, and multiple systems.

At present, Health Commissioner Arnold H. Kegel, who kept the pot boiling all summer, is attending the Pan-American Medical Congress in the city of Panama. Commissioner Kegel made a flying clinical trip to the Canal Zone from Miami, Florida, with four other surgeons, and expects to return—also by air—shortly before the month ends.

No new developments in the local situation have been brought to the attention of the Health Department, according to the Chicago Tribune.

(Concluded on Page 4, Column 5)

## COPELAND NOW SHIPPING NEW MODELS TO DEALERS

Mt. Clemens, Mich.—Shipments of new Copeland equipment are now under way, and the entire new line will be on view in all of the company's sales outlets throughout the country and in Canada the first of March.

The features of the new line are locked compartments, eliminating possibility of injury to children seeking to discover "what makes the refrigerator work," and doing away entirely with exposed units. The compartment containing the mechanism, it is stated, is at the bottom of the refrigerator and locked with a key.

(Concluded on Page 2, Column 2)

## Turn on the Heat

ESKIMO heaven, 453 degrees below zero, but no Eskimos allowed. This temperature, six degrees lower than the one scientists consider attainable, is being sought by Dr. F. G. Brickwedde, director of the low temperature laboratory of the Bureau of Standards at Washington.

The 453 degree mark is sought in connection with the liquefaction of helium, which is the hardest substance on earth to liquefy and freeze.

The freezing is effected by putting the gas under a pressure of 2,000 lbs. to the square inch, after which it is cooled by liquid air to a temperature of 310 degrees below zero.

A supply of the most refined helium obtainable is then subjected to a pressure of 200 pounds to the square inch. The compressed gas is then cooled with liquid air and liquid hydrogen to the temperature of the latter, 423 degrees below zero, Fahrenheit.

Still a gas at this low temperature, the helium is allowed to expand and produce additional refrigeration with an attendant drop in temperature to 453 degrees, its freezing point, or lower.

## WILSON HEADS \$1,000,000 DETROIT AD FUND

Detroit, Mich.—William Robert Wilson, president of the Allied Motors Corporation, and chairman of the board of the Copeland Products, Inc., has announced his acceptance of the chairmanship of the Greater Detroit committee to raise a million dollars to advertise the City of Detroit over a period of the next three years.

Under the plans for the campaign which is to be directed by the Adcraft Club, of which W. R. Ewald is president, \$1,000,000 will be expended during the next three years to show to the world at large just what Detroit's advantages are and what it is doing industrially.

## TRUSTEE WILL CONTINUE TO OPERATE REX PLANT

Connersville, Ind.—Immediately after his appointment as trustee on Feb. 10, Raymond S. Springer announced that the Rex Manufacturing Company, recently adjudged a voluntary bankrupt, would continue business and would execute a number of orders for refrigerators and radio cabinets. Mr. Springer, who became trustee following his appointment as receiver upon the filing of the petition, announced that the assets of the Rex Company amount to about \$300,000, and the liabilities to only \$192,000. He predicted that all of the creditors would be paid in full.

C. C. Hull, president of the company at the time of the filing of the petition, states that plans for reorganization are under way, and will be studied by those interested, while the trustee is going on with the company's work. Listed among the assets are raw materials, lumber and supplies worth \$156,000.

The Rex Manufacturing Company has been in business for 31 years, and has never been in financial difficulties before. For a number of years it was a

(Concluded on Page 4, Column 5)

## GENERAL ELECTRIC PLANS BIG SALES CONFERENCE

Cleveland, Ohio—The keynote of the spring campaign of the electric refrigeration department of the General Electric Company will be sounded here, February 19-20, when officials, distributors, keymen and salesmen meet for their annual convention.

About 500 will attend from all sections of the country, and the program for the two-day session will include discussion of research, engineering, manufacture, advertising and sales. The convention program will be most informative, says T. K. Quinn, general manager.

Research will be a prominent subject

(Concluded on Page 2, Column 1)

## DETROIT CONVENTION ESTABLISHES NEW FRIGIDAIRE RECORDS

Old Marks Go as 1,200 Salesmen  
Cheer Troupers From Dayton

Detroit, Mich.—That perambulating storehouse of energy and enthusiasm known as the 1930 Frigidaire A. B. C. Convention, arrived in Detroit on February 4, paused for a day, and departed, leaving behind a band of 1,200 Frigidaire dealers and salesmen from seven cities looking forward with keen anticipation to another year of hard and successful work. The convention, which began its operations in Atlanta on January 21, visited Roanoke, Philadelphia, New York, Boston and Buffalo before coming to Detroit. It will finish its career on February 21 in San Francisco, stopping enroute in Chicago, where two separate conventions will be held, Memphis, Dallas and Kansas City.

The seven cities represented at Detroit were Cleveland, Flint, Toledo, Columbus, Cincinnati, Dayton and Detroit. Including as it did the fourth and fifth cities of the country, as well as five other big towns, the Detroit convention proved one of the largest on the long Frigidaire schedule. One record after another was broken. The call for orders taken thus far this year brought a total of \$1,040,000. These orders were carried to the stage of the Schubert-Lafayette Theatre in special dispatch bags by the men from each city who had made the best sales records. They were attired in varied costumes, the Columbus team, dressed like the original Christopher, gaining the most applause. J. R. Halladay, of Detroit, was the individual star among the January salesmen, having sold a little more than 6,000 per cent of his quota.

When the time came for distribution of the purses of gold won in 1929 by the star, senior and junior members of the B. T. U. Club, J. A. Harlan, sales

(Concluded on Page 4, Column 1)

## INDUSTRY MAKES PROTEST AT WASHINGTON HEARING

Washington, D. C.—The proposed new mechanical refrigeration regulations for the District of Columbia were attacked in toto and in their various sections here Monday, February 10, by representatives of the refrigeration industry at a hearing before Col. William B. Ladue, and Proctor L. Dougherty, members of the Board of Commissioners of the District, and A. R. McGonegal, inspector of plumbing.

The offensive against the regulations was led by Royal T. McKenna and Roy E. Smithson, of the General Motors Corporation, and Charles C. Spreen, of the Kelvinator Corporation.

Mr. McKenna declared there is no necessity for a code in the District of Columbia at this time that there is no public demand for it and that the fire record of the District does not show there is any public hazard involved in the operation of refrigerating systems.

Many provisions of these proposed regulations are unjustly discriminatory against and unduly prejudiced to our clients," Mr. McKenna asserted. "Some of them," he added, "are unlawful."

Mr. McKenna further complained that the District of Columbia commissioners "have not asked us to come in and help in the preparation of the regulations, except at public hearings."

"I don't believe they have treated us as courteously as they have others," he said.

E. T. Williams, of New York, representing Servel, Inc., and a member of the technical committee of the National Electrical Manufacturers' Association, urged the commission to substitute for its proposed code that formulated by the executive committee of the American Society of Refrigerating Engineers.

Answering a question by Col. Ladue, Mr. Williams said the latter code had not been approved by the society as a whole, but had been accepted by the executive committee.

Col. Ladue objected to consideration of that code at today's hearing. He said the matter then before the commissioners was the commission's own code, and that it would be improper to discuss another set of regulations which many at the hearing had not had an opportunity to examine.

(Concluded on Page 21, Column 2)

## GENERAL ELECTRIC PLANS BIG SALES CONFERENCE

(Concluded from Page 1, Column 4) of the afternoon session of the opening day, E. L. Manning, of the General Electric Company's research laboratories at Schenectady, N. Y., will open the discussion with a talk on "Research—and What It Means to Industry." He will touch upon the fifteen years of research which the General Electric Company devoted to electric refrigeration before it brought out its refrigerator, and he will speak with work of this nature which is now being carried on.

Sales problems will be discussed by P. B. Zimmerman, general sales manager; the year's advertising program will be the subject of an address by W. J. Daily, sales promotion manager; and discussion of distributor operation will be led by M. F. Mahony, assistant to sales manager. Merchandising ideas will be expounded by a four-act play, directed by A. C. Mayer, merchandising service manager.

Other speakers will include C. E. Eveleth, vice-president of the General Electric Company, Schenectady; A. R. Stevenson, Jr., Schenectady; Clark Orr, Fort Wayne, Ind.; Chris Steenstrup, Schenectady; H. S. O'Neal, Chicago, and H. J. Francis, New York.

In keeping with the modern idea which electric refrigeration typifies, the program will include a number of novel features. Chief among these will be the photophone, "Sealed-in-Steel," which depicts a series of dramatic tests of the General Electric refrigerator. This talking movie portrays the constant struggles of mankind against the elements and other natural enemies from the days when knighthood was in flower down to the present age of electrical wonders. Tests to which the electric refrigerator was subjected included attacks by fire, water and sand-blasting. The picture proves that it survived them all.

Another photophone, "Pathfinders of Business," will depict graphically the effort being made along the lines of advertising and sales promotion.

Featuring the convention will be the presence of 150 "cabinet members," top-notch salesmen of the Toppers' Club. This club is composed of the leading

General Electric refrigerator salesmen throughout the country. Each of the 150 "cabinet members" has sold more than \$25,000 worth of refrigerators in retail sales.

Following the noon adjournment on the opening day, the "Sealed-in-Steel" parade will be staged, from Cleveland Auditorium to the Hotel Hollenden.

The convention banquet will be held on Wednesday night, February 19. At the banquet, Mr. Zimmerman will present the trophies of the leading distributor in the "Realization Contest." He also will present to the leading cabinet member his certificate of membership and button.

The Cleveland convention will be followed by a series of field meetings to be staged in about fifty leading cities of the country.

## NEW COPELAND MODELS GO ON DISPLAY MARCH 1

(Concluded from Page 1, Column 2)

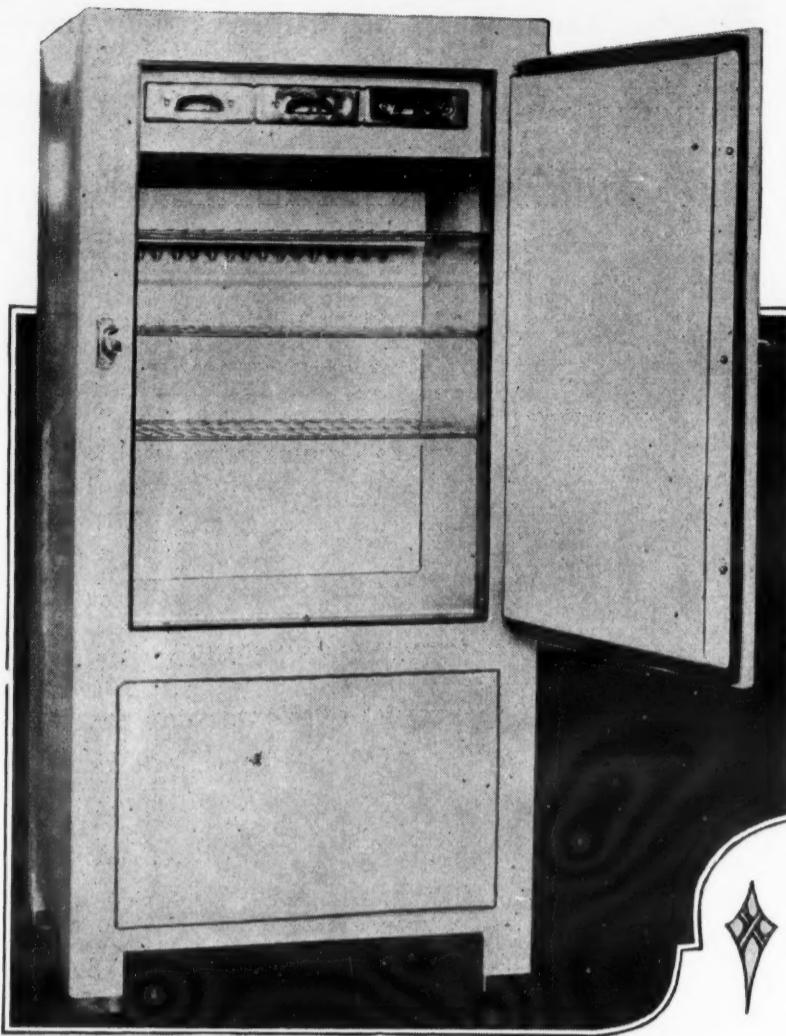
Louvers in the new Copeland line have been eliminated, ventilation being obtained through air being taken from underneath the refrigerator and forced out through the rear. By running the tubing containing the electric wiring down the back of the box through a neat metal channel on one side, and placing a "dummy" channel on the other side, the box is kept a distance from the wall, insuring increased ventilation. This also serves as a double protection to the wiring.

The new Copeland line will include the de luxe, which will be supplied with tops in eight optional colors, including Oriental green, Pinard yellow, Olive buff, King's blue, Carmine red, dark Puritan gray or storm gray, and Venetian pink. This provides two more colors than were offered last year, giving colors that investigation shows will blend with any color scheme the housewife may elect for her kitchen.

The new line is equipped with bar shelves of heavy steel, tinned and retinned, and running from the front to the rear instead of crosswise.

Large orders were placed by many of the Copeland distributors who were present at the convention last month.

## Insulated Compartment for Ice Trays



## ENGINEERS PLAN WAYS TO TEST REFRIGERATORS

(Concluded from Page 1, Column 1)

7. Ice freezing tests.
8. Comparison of cubic foot capacity to power required.
9. What records shall be taken?
10. Instruments to be used.
11. Time allowed to reach normal.

The first subject called forth views on both sides of the question, the men who are working in the mechanical refrigeration field advancing the view that tests at a room temperature of 75 or 80 degrees would not tell the whole story, as mechanical refrigerators in many cases are subjected to much higher room temperatures than an iced refrigerator would be expected to stand. A wider range of tests at temperatures of 100 degrees, or even higher, were advocated. The growing market for mechanical refrigeration in the tropics was pointed out as a compelling reason why any test code for mechanical units should provide for tests under an outside temperature much higher than 80 degrees.

Diversity of opinion continued on nearly all of the topics enumerated above, and the discussion brought out clearly the fact that the drafting of a test code for mechanical refrigerators will be an even more difficult job than preparing that now proposed for iced refrigerators. The variance in design, in capacity, and in power units are so great that it will be a hard task to reduce them to standard methods of comparison. Those present seemed to feel, however, that the work should be undertaken, and that there is a real need for some standard method of testing mechanical refrigerators.

At the evening meeting Mr. Thomas again presided and led a discussion on cabinet design, after D. R. Brewster, field engineer of the National Lumber Manufacturers' Association, had described the tests made last year on three wood ice boxes. These tests showed that a wood box, properly enameled, made a remarkably good performance record. At the end of a rigorous seven weeks' test, it did its work almost as well as when the test began. The increase in heat leakage was negligible.

The importance of the baffle was the chief subject introduced by Mr. Thomas. He advocated a return to simplicity in cabinet design, and was supported in his views by representatives of both the ice and mechanical branches of the industry. Most of the speakers seemed to think that perhaps the baffle has been overemphasized.

Among those present from out of town who took part in the discussion were: E. L. Hinckley, assistant vice-president, Middle West Utilities Co., Chicago; Herman E. Kranz, Grigsby-Grunow Co., Chicago; A. H. Jaeger, vice-president and sales manager, Leonard Refrigerator Co., Grand Rapids, Mich.; E. D. Pellegrin, designing and sales engineer, Benjamin Electric Mfg. Co., Chicago; E. F. Santen, C. D. Johnson Lumber Co., Portland, Ore.; Lloyd Hocrafer, production engineer, Illinois Refrigerator Co., Morrison, Ill.; M. F. Melvin, special representative, The Insulite Co., Minneapolis; E. Hauenstein, sales manager, City Ice and Fuel Co., Cincinnati; F. C. Geiler, chief engineer, Trupar Mfg. Co., Dayton, Ohio; Emerson Brandt, assistant to president, Middle West Utilities Co., Chicago; C. W. Cope, Alaska Refrigerator Co., Muskegon, Mich.; C. H. Fessenden, professor of mechanical engineering, University of Michigan; C. C. Vogt, research chemist, Armstrong Cork Co., Lancaster, Pa.; Martin L. Goulooze, engineer, Leonard Refrigerator Co., Grand Rapids, Mich.; Charles H. Roe, commercial engineer, Electrical Testing Laboratories, New York; F. H. Ryder, vice-president, Harder Refrigerator Co., Cobleskill, N. Y.; Raymond Ring, district manager, Dry Zero Corp., Chicago, and M. C. Rowlis, assistant to president, Climax Electric Refrigerator Co., Chicago.

From Detroit were: George B. Bright; William J. L. Smith, Kelvinator; Harry C. Hayes, chief engineer, Absopure; L. A. Philipp, Kelvinator; Don G. Ellis, Kelvinator; G. Roy Ohmart, assistant chief engineer, Absopure; Frank W. Dikman and Paul J. Schaefer, J. L. Hudson Co.

## South Triumphs

SALESMEN of the Birmingham Gas Co., inspired by the pace set by A. Y. Ayres, assistant sales manager, recently won an Electrolux sales contest and split up the spoils, including a sum of fifty dollars donated by the Minneapolis Gas Light Co. The southern men sold 483 machines to nose out their northern rivals by 48 units. Interest in the contest led to the placing of a side bet of fifty dollars by the companies.

A. Y. Ayres averaged better than four sales a day during the ninety-day period, to make a total of 373 machines. When the prospect balked, Mr. Ayres started where the other salesmen left off.

## COPELAND INSTALLS MULTIPLE SYSTEM

Watertown, S. Dakota.—The Palace Apartments has recently installed Copeland equipment. Forty-three 7A new type cold-hold tanks, and two 1 h.p. type X water-cooled compressors, were placed by the W. S. Nott Co., Minneapolis, Minn.

A. Victor Nielsen, department manager of the Nott Co., distributor for Copeland Products, made the sale.

## KELVINATOR SHIPMENTS UP 53% IN 1ST QUARTER

Detroit, Mich.—Kelvinator shipments for the first four months of the fiscal year ending January 31, 1930, show an increase of 53 per cent over the same period of 1929, according to H. W. Burrill, vice-president in charge of sales of the Kelvinator Corporation.

This percentage of increase in Kelvinator business as compared with the first four months of the fiscal year of 1929 is considered by Mr. Burrill to be a very remarkable showing. He and President G. W. Mason have made trips this winter to every section of the country, visiting the distributors of Kelvinator products, and state that they have found abundant enthusiasm over the improvements in the new models.

The Kerotest line of Brass refrigerator fittings is most complete—a size, shape and type for your every purpose.

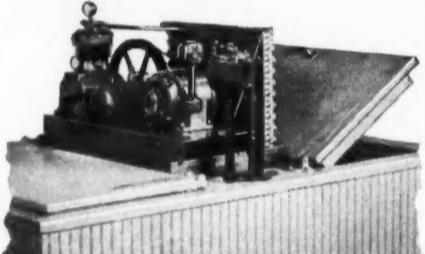
Write for complete, illustrated Bulletin giving sizes, description and prices.

KEROTEST MANUFACTURING COMPANY  
PITTSBURGH, PA.

## DOUBLE YOUR MARKET by Adding Farm Refrigeration Now!

THE Dairy Refrigeration Company are specialists in this particular field. Their years of research, and practical, engineering experience in farm refrigeration have resulted in a unit which produces TWICE THE CAPACITY... AT HALF THE PRICE. Now Nationally advertised in "Electricity on the Farm."

DEALERS:  
Cash in on this Spring's business  
Write for open territory



### Glenn Dairy Ice

"A machine that will do the work... at a price you can afford to pay."

### DAIRY REFRIGERATION COMPANY

Dept. E. 311 - 64th Ave. Milwaukee, Wis.

## KEROTEST FORGED BRASS FITTINGS



## A PROSPECT ASKS

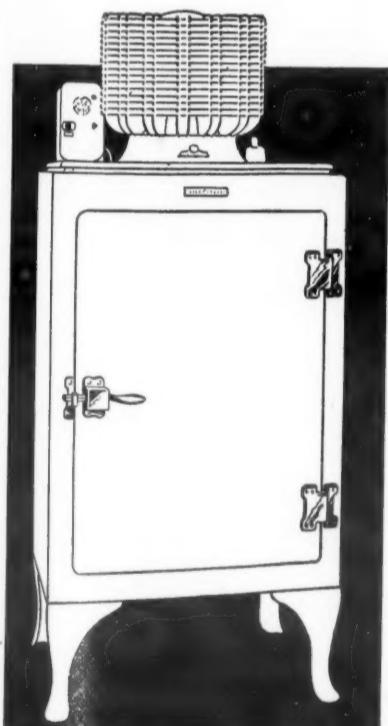
## 5 QUESTIONS

- 1 Is the "On Top" mechanism of the General Electric Refrigerator actually an advantage?
- 2 Which refrigerator is the most inexpensive to own?
- 3 What does it mean to *me* if the mechanism of my refrigerator is "sealed in steel"?
- 4 What has the average owner of a General Electric Refrigerator paid annually for service?
- 5 How do I know which refrigerator will *continue* to operate dependably, efficiently and economically after years of service?

## THE DEALER GIVES

## I ANSWER

Of the hundreds of thousands of owners



not one

has paid a cent for SERVICE !

GENERAL  ELECTRIC  
ALL-STEEL REFRIGERATOR

## RECORDS GO BY BOARD AT DETROIT CONVENTION

(Concluded from Page 1, Column 5)

manager and guiding spirit of the convention, handed out \$19,000. Mr. Harlan is gradually perfecting a remarkably efficient technique in distributing little bags of twenty-dollar gold pieces and shaking hands at one and the same time. By the time the convention finishes its ramblings, he will have it down pat, and then will have to forget it until next year, as a sales manager's regular job is to rake in the shekels, not to hand them out.

The order taking and gold giving out of the way, the convention settled down to the business of finding out exactly why they had been summoned to Detroit by the band of travelers from Dayton. A carefully and cleverly arranged sequence of sober speeches and less sober playlets, each carrying a rather carelessly hidden message, began with a speech from E. G. Blechler, president of the Frigidaire Corporation. Mr. Blechler was not present to make his speech, but the talking moving picture screen proved an excellent substitute for his actual presence. The only really regrettable feature was the fact that his vocal image on the screen was not able to hear the shouts of applause that greeted his predictions that just as 1929 had surpassed 1928, 1930 would set new Frigidaire records.

Other factory officials who could not attend the various conventions followed Mr. Blechler on the screen. Most of them not only talked, but showed the various factory processes under their jurisdiction.

Mrs. Elizabeth Stone Macdonald, late of Boston, but now of Dayton, and head of the as yet unnamed department that has been organized to put the woman's viewpoint more effectively before the Frigidaire sales organization through-



**F**RIGIDAIRE conventioners, who are putting on the "Big Show" in thirteen cities. Left to right—P. F. Bunker; Inco Williams; George Durban; G. R. Nauman; R. F. Callaway, manager of branches; O. E. Wolfe; Mrs. Elizabeth Macdonald, home economist; H. F. Lehman, installation and service manager; J. A. Harlan, sales manager of distributors' division; H. T. Mutchner; Miss Theresa Schneble; O. C. Callison; Miss Angela Flynn; E. D. Doty, advertising manager; J. J. Nance; R. B. Ambrose; A. D. Farrell; R. L. Lee, sales promotion manager, and L. E. Gilbert.

out the country, made the new hydrator her chief theme. She urged every man present to take full advantage of the new addition to Frigidaire equipment. That her words made a clear impression on her audience was clearly demonstrated a few moments later, when Mr. Harlan, in response to questions from the floor of the house, stated the dates on which hydrators would be available for units already in stock and in the homes of users. The shout that went up when he said that hydrators would be ready this month for units now held

in stock, proved that the salesmen present were all set to make the most of the hydrator as a selling argument.

New equipment of 1930, effectively displayed and explained by L. E. Gilbert, closed the morning session. The commercial men had their chance to cheer when the new 350-pound compressor, in both air and water-cooled types, came into view on the stage at a wave of Mr. Gilbert's hands. The airy way in which he waved the new products in and out almost made those present forget the long hours of toil that must

have gone into their design and production. They seemed like creations of the moment sprung from Mr. Gilbert's facile brain.

Behind the band, the loyal 1,200 then marched to the Book-Cadillac, where a luncheon was served. No speeches interrupted the process of eating, and just an hour later the men were back in the theatre, ready for the afternoon proceedings.

This session opened with a talk by R. F. Callaway, manager of branches, in which he contrasted selling conditions

# Refrigerators insulated with Celotex are easier to sell

**S**ELLING points based on detailed reasoning are effective. But selling points that your customers accept without explanation are the most effective of all.

That's why Celotex Refrigerator Insulation makes refrigerators easier to sell. Nearly every man and woman already knows about Celotex . . . appreciates its remarkable effectiveness in shutting room heat out of the refrigerator cabinet . . . welcomes it as successful insulation.

When the salesman on the floor talks Celotex insulation he has millions of dollars worth of national advertising behind his statements. See that all your men take full advantage of the nation-wide enthusiasm for Celotex.

### CELOTEX INSULATION SHORTENS THE RUNNING TIME OF THE REFRIGERATING UNIT

Celotex insulated cabinets, by shutting out room heat, make it easier to maintain low temperatures in the refrigerator . . . and consequently shortens the running time of the refrigerating unit.

When you lessen the running time of the unit, repairs and service work are minimized and the life of the unit increased. Besides, electricity bills are considerably reduced.

# CELOTEX

BRAND

INSULATING CANE BOARD

REFRIGERATOR INSULATION

The word  
**CELOTEX**  
(Reg. U. S. Pat. Off.)  
the trademark of and indicates  
manufactured by  
The Celotex Company  
Chicago, Ill.

### Here are a few of the reasons why Celotex Refrigerator Insulation is preferred by many leading refrigerator manufacturers

**A** Meets strict engineering requirements. The Celotex used in refrigerators is a special kind of Celotex . . . fabricated by processes that increase its insulating efficiency to the highest point. It is as effective as any material manufactured for this use.

**B** Cut to fit exactly. Celotex is cut to fit exact specifications, so that each insulated area is entirely covered by a single board of the proper thickness. Open joints and seams are eliminated. Celotex cannot sag or settle with time.

**C** Clean, odorless, sanitary. No insulation is more sanitary in every way than Celotex. These fibres are carefully sterilized . . . are entirely odorless.

The boards are made from the long, tough fibres of cane, containing millions of tiny sealed air cells that resist the passage of heat.

**D** Rigid strength plus lightness. The cabinet of an electric refrigerator is subject to strain because of changing room temperatures. So the structural strength of Celotex is important. The rigid boards reinforce the walls and frame of the cabinet . . . add to the life of the refrigerator.

**THE CELOTEX COMPANY**  
919 North Michigan Avenue  
CHICAGO, ILLINOIS  
In Canada: Alexander Murray & Co., Ltd., Montreal  
Mills: New Orleans, Louisiana  
Branch sales offices in many principal cities  
(See telephone books for addresses)  
Sales distributors throughout the world

### Talk Celotex

When one of your salesmen talks Celotex insulation he is on ground familiar to your customers. He gives them the chance to agree with him intelligently on a subject they understand.

This agreement is the turning point in hundreds of sales. It leads quickly and naturally into a successful closing.

eight years ago with those facing the sales organization in 1930.

Presentation of the new demonstration album series was made by J. J. Nance, who showed and explained the new household demonstration album, the revised floor demonstration album, the new commercial album, and the new apartment house reference book.

The series of playlets, presented in terse and amusing fashion, were the high spots in the afternoon, and R. B. Ambrose was the brightest individual star of the excellent troupe of Thespians developed at the Dayton factory. Any sort of part seemed easy to Mr. Ambrose. In one sketch he was a wise supervisor helping out a rather listless salesman. Ten minutes later he popped up as the dumbest of all dumb salesmen, and as he did equally well in both parts, he must be a real actor. He couldn't have been himself on both occasions.

E. D. Doty, advertising manager, supported by an able cast, including O. C. Callison and George Nauman, O. W. Wolf and Miss Theresa M. Schneble, explained the fundamental purpose of advertising and depicted the exact way in which the Frigidaire national advertising brings actual dollars, in the form of lessened sales resistance, into the pockets of the selling organization.

H. F. Lehman, service manager, pledged continued support of the installation and service department during 1930 to the sales organization.

G. A. Ames, of the General Motors Acceptance Corporation, addressed the convention, urging greater use of the G. M. A. C. facilities.

Two young women from Dayton, Miss Theresa Schneble and Miss Angela Flynn, had to disguise their faith in Frigidaire while they played the parts of housewives turning a deaf ear to the blandishments of refrigerator salesmen. Miss Flynn also represented the Spirit of Frigidaire in the pageant which closed the afternoon meeting.

It was no easy job to find a hall in Detroit big enough to seat the crowd comfortably at the annual banquet, and also to find room for a stage on which the present the especially selected cabaret performance. The Masonic Temple finally was chosen and proved to be one of the best banquet halls on the traveling convention's list. The 1,200 workers were augmented by a large number of guests, including a representative of the Mayor of Detroit and several other city officials. The staff of the Frigidaire branch in Detroit also was there. The cabaret provided entertainment during the dinner: entertainment that seemed to live up to its name, if the cheers that greeted the girls is a fair criterion. The session of speech making after the dinner was short. C. E. Quigley, Detroit, introduced the speakers. R. F. Callaway, manager of branches, made the principal speech for the Dayton organization and presented some special prizes. A tall cup was awarded to E. E. Rouech, Detroit manager.

The reply on behalf of the distributors and dealers was made by H. W. Prior, Dayton distributor. Mr. Harlan then closed the Detroit convention with a quietly voiced yet stirring appeal. Interpreting the A. B. symbols as Accept, Believe, Co-operate, he said: "Look at these in reference to yourself and your daily life. First, accept ideals which form a mold into which we should grow. Ideals of honesty, fair dealing and service to fellow men. Accept them and make them yours."

"Believe is the hardest of all to achieve. Believe in your company. It is made up of human beings trying to do right. Be patient and believe in them, for no one wants to be wrong. Believe in the product and believe in yourself."

## TO RENEW CODE BATTLE ON THE CHICAGO FRONT

(Concluded from Page 1, Column 2)

According to Assistant Commissioner Koehler, who is occupying Dr. Kegel's office in the latter's absence, Gang feuds are again occupying the attention of the headline writers, and all the available leaks of methyl chloride and sulphur dioxide have apparently been plugged.

J. J. Aeberly, Chicago Health Department engineer, who wrote most of the so-called "Kegel codes," declares that the demands of the Health Department for leakage limitation will not be changed. The system-within-a-system still remains the most acceptable type of multiple refrigeration to Mr. Aeberly and his associates.

## REX BANKRUPTCY

(Concluded from Page 1, Column 4)

Leader in the manufacture of automobile tops, a business which disappeared almost overnight with the rise to popularity of the closed car. About three years ago the manufacture of refrigerator cabinets was undertaken, and the Company made cabinets for several of the leading manufacturers of electric refrigerators. In November of last year a wholesale cancellation of orders left the company with large stocks of material on hand, and the present bankruptcy was the result.

## AMBITION BEGUILLES CONVENTIONEERS

FAIR dealing was emphasized so many times, as an essential part of the Frigidaire creed, that it seemed as though the A. B. C. sequence of keynotes might well have been extended a little further down the alphabet.

RUGGEDNESS is a quality that is needed by every member of the traveling group. They will have been on the road for a solid month and a few days over when the convention finally folds its wings at San Francisco.

IF I. R. Hallady, the Detroit sales man who made 6,000 per cent of his January quota, wants to still the beating of numberless Frigidaire hearts, he will come forward and state just what that quota was. The guesses of his envious colleagues from other cities ran all the way from minus 10 to plus 1.

GRINDING brakes and a wailing screech of the whistle on a newly simulated train ushered in the morning session at the theatre. The illusion was perfect, and the Dayton travelers clambered out and settled down to work.

IN every department and at every session the Convention rolled along like a well oiled machine. The time schedule was adhered to rigidly and just as J. A. Harlan promised, the boys were set free for the evening shortly after nine o'clock.

DURING the afternoon session E. D. Doty, advertising manager, had his opportunity. He displayed some of the 1930 advertisements, and in a rapid fire playlet with several scenes showed how Frigidaire advertising is constantly building good will and lessening sales resistance.

ADVERTISING by the Frigidaire Corporation and by its distributors and dealers throughout the country will involve an expenditure of \$6,250,000 in 1930. Much of this money will be spent in newspapers, popular magazines, trade publications and other media also will be used.

INTERESTED observers found in the Book-Cadillac an exhibit of Frigidaire products was set up. In addition to the latest models, some of the veterans of bygone years were on hand to furnish a bit of contrast. Some of the youngsters didn't even know what they were.

RINGING the changes on the A. B. C. slogan was one of the favorite indoor sports. From President Blechler down, every speaker had his own version of the magic code. Affability, Business, Courtesy, is hereby offered as the selection of one whose contact with the Frigidaire organization was that of guest and host.

ENTHUSIASM pervaded the Convention all day long. It was more like a college reunion than a business convention so far as the yelling, singing and cheering was concerned, and it wasn't made to order cheering either. It broke forth spontaneously sometimes when those in charge least expected it.

AMBROSE the actor has earned a place in modern Frigidaire history along with the hydrator and the cold control. Amiable, able, active ambitious Ambrose, bids fair to be remembered even longer than any of the other members of the Dayton troupe of 1930.

BEAMING with pleasure as she was introduced by Mr. Harlan, Mrs. Macdonald, evidently with her mind on the cabaret girls who were to be seen later in the day, declared that her age and architecture debarred her from being classed as entertainment. She meant business and she got her message across in businesslike fashion.

CONVENTIONS may come, and conventions may go, but Frigidaire with its private cars, its carefully balanced program, its canned President and its esprit de corps is setting an example that redounds to the credit of the entire refrigeration industry.

## A Sale Every Day Makes Powell Feel Gay

Detroit, Mich.—A shining light among the 1,200 men who attended the Frigidaire A. B. C. Convention here on Feb. 4 was George L. Powell, of the Detroit Branch. Mr. Powell, whose name appeared in the program as a star member of the B. T. U. Club, and also as a winner of a trip to Dayton, has to his credit a record for consistency in effective selling effort that may easily prove a mark for the entire refrigeration industry to shoot at.

Working intensively in a territory extending from Woodward Avenue to 12th Street, and from the Detroit River to Eight Mile Road, an area of about twelve square miles, Mr. Powell sold at least one Frigidaire household model on every working day of the last five months of 1928, and continued his record-breaking string of sales through the first six months of 1929. In that time he did no apartment house business, his work consisting of one household sale after another to single homes.

Mr. Powell, who is shown in the accompanying photograph, is now a supervisor. The Frigidaire Corporation cheerfully admits that his performance is a record for that organization, and is inclined to believe that it is an industry record as well.

### Net Profit \$78 Plus Experience

The Frigidaire B. T. U. Club has worried along thus far with three classes of members: star, senior and junior, but it may be forced to add another to take care of the case of a salesman who attended one of the regional conventions. He brought his wife to the convention with him, and while she was sitting in the balcony watching him march up to the stage and receive \$150 in gold, someone entered their room at the hotel and stole \$72 from her handbag. The salesman, who prefers not to be identified, wants to know two things: The first is, what title goes with a \$78 bonus, and the second is whether he should leave his wife home if he makes the B. T. U. Club in 1931?

### MRS. MACDONALD BRINGS HOUSEWIFE'S VIEWPOINT

MRS. Elizabeth Stone Macdonald, who is now a member of the Frigidaire factory organization and who is traveling with the A. B. C. Convention in its swing around the circle, has long been prominent in the field of home economics. She is making her first contact with the field during the present series of Frigidaire regional conventions. Mrs. Macdonald founded and conducted for a number of years the "Priscilla Proving Plant," a laboratory for the testing of household appliances and research in home economics conducted by the magazine, *Modern Priscilla*. After nine years with this publication, she spent five years as head of the home economics department at Boston University.

In addition to this work, she has been a contributor to other magazines dealing with household problems, and with



her husband is the author of a book, "Home Making, a Profession for Men and Women." When she was married, she and her husband built their own home out of a barn, and adopted a son in order to get on a family basis right at the start. She did her own housework, cooking, sweeping, ironing and scrubbing, yet managed to entertain an average of 52 people a week the first year of her married life.

Back in 1920 the Macdonalds stored their furniture and lived in a four-room tenement in Boston in order to study living conditions.

She studied at Radcliffe College and the Massachusetts Institute of Technology. She also has lived in France for several years.



Closing his daily order.

## HUBERT NOW DIRECTOR OF PUBLICITY FOR N. E. M. A

EDWARD H. HUBERT, formerly an assistant secretary of the American Institute of Electrical Engineers, has been appointed director of publicity for the National Electrical Manufacturers Association, to succeed Albert Pfaltz, resigned.

At the American Institute of Electrical Engineers, where Mr. Hubert has been located during the last six years, he has been secretary of the Meetings and Papers Committee and his work has been in connection with the arrangement of convention programs and with publications. He was formerly with the McGraw-Hill Publishing Company, where he served in the editorial department of *Electrical World* and other publications. Mr. Hubert was previously connected with the engineering department of the Georgia Power Company.

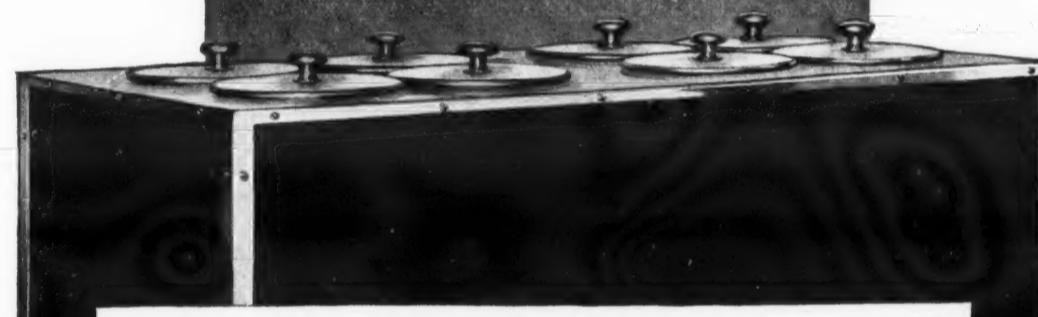
### LIQUID CARBONIC PLANS PACIFIC BRANCH PLANT

Seattle, Wash.—The Liquid Carbonic Corporation of Chicago is considering several sites here for the construction of a \$250,000 branch plant. Solid carbon dioxide ice will be manufactured in the plant, and a warehouse for soda fountain and refrigeration equipment will be built.

### TROLAN MADE MANAGER OF FRIGIDAIRE BRANCH

Des Moines, Iowa—W. A. Trolan, of San Antonio, Texas, has been appointed manager of the local Frigidaire branch. J. V. Tedford, who has been connected with the branch here in an executive capacity, has been made sales manager.

# TOP QUALITY



### Cabinet manufacturers value Monel Metal's durability

THE top of an ice cream cabinet must stand such hard use that it is only natural that the leading cabinet manufacturers have adopted durable Monel Metal.

These manufacturers realize that a cabinet top must have more durability...longer life...than any other part of the equipment.

Monel Metal, as a material for top and trim has many unique advantages. Probably the two most important are its lasting attractiveness and its remarkably long life in daily use.

This silvery Nickel alloy cannot rust. It resists corrosion...it is not affected by food or fruit acids. It is easily cleaned and kept clean. Natural, therefore, that Monel Metal should have the eye-appeal that results from a neat and sanitary appearance.

Monel Metal is tough and strong as steel—it has no coating to chip, crack or wear off. The experience of thousands of users proves that these properties give Monel Metal tops remarkably long life.

Take advantage of Monel Metal's properties and the acceptance that has been created for Monel Metal through consistent, year by year advertising in both national and trade publications.

Monel Metal is a technically controlled Nickel-Copper alloy of high Nickel content. It is mined, smelted, refined, rolled and marketed solely by The International Nickel Company. The name "Monel Metal" is a registered trade mark.

# MONEL METAL



SEND FOR ICE CREAM CABINET LITERATURE

THE INTERNATIONAL NICKEL COMPANY, INC., 67 WALL STREET, NEW YORK, N.Y.

## OCTAGON FOUNTAIN IN SCHOOL LUNCH ROOM

SEVERAL hundred students in Jefferson High School, Los Angeles, Calif., keep healthy by drinking cool water from this fountain. The fountain is located in the center of the school's cafeteria and is made of ornamental tile, constructed in the shape of an octagon.

The water cooling low side is a Day & Night storage type cooler of the 40-gallon size. This is connected with the large refrigerator in the kitchen of the cafeteria. The fountain has six water outlets, operating from the storage tank, which is indicated by the dotted line on the bottom of the cut.

The front door permits inspection of the float valve system or adjustment or service necessary to the refrigeration equipment in the tank. The water cooler and refrigerator are hooked in multiple and are operated by a one horse power condensing unit. The installation of the fountain was made by the Collins Kelvinator Corp., Los Angeles.

### JENKINS APPOINTED G. E. NEW ENGLAND MANAGER

Boston, Mass.—H. Johnstone Jenkins, formerly connected with the executive offices of the electric refrigerator department of the General Electric Company at Cleveland, has come to Boston as sales manager for the New England territory.

Mr. Jenkins has been connected with the General Electric refrigerator ever since its presentation to the public. During 1927 and 1928 he devoted his efforts to the Chicago organization, and then was called to the executive offices, where he did national organization work during 1929, working through the larger distributors of the country.

# You can't dodge the fact that you're selling INSULATION

... And you can't dodge the fact that corkboard for 30 years has been the standard insulation in the refrigeration industry.

WHAT good is appearance—in a radio, an automobile, or a refrigerator—if performance is lacking?

You are not selling furniture. You are selling refrigeration. And bear in mind that there can be no efficient, economical refrigeration without the protection of insulation that is adequate in both quality and thickness. Beyond any question, insulation is an essential factor in your selling.

And there need be no guess-work about insulation. The experimenting has all been done. Commercial refrigeration—the business of handling perishable food products—has tried every insulation made—tested them all in actual service—and has standardized on corkboard.

Corkboard affords maximum protection against in-leaking heat, and so holds uniform temperatures at low cost for operation. Corkboard is not subject to deterioration from moisture absorption. It neither shrinks nor swells, and it cannot settle. In the household refrigerator, as in commercial cold storage, corkboard is the one insulation that insures permanent efficiency.

## California High School Girls Thrive on Good Food and Properly Cooled Water



### ELECTRICAL DISTRIBUTOR CHANGES NAME

Detroit, Mich.—The Commercial Electric Supply Co., wholesale electrical supply distributors since 1896, with warehouses in Detroit, Grand Rapids and Flint, Mich., has changed its name to Westinghouse Electric Supply Co. Previous to this change in name, this company was one of the nineteen concerns owned by the Westinghouse Commercial Investment Co.

The management and personnel of the company will remain the same. C. E. Ludovici is district manager; R. T. Stewart, auditor, and C. G. Parmalee, sales manager.

### HEALD NEW SALES MANAGER FOR KELVINATOR-ALBANY

Syracuse, N. Y.—F. H. Fenn, manager of Kelvinator-Syracuse, reports the appointment of Robert Heald as sales manager for Kelvinator-Albany, Albany, N. Y. Mr. Heald was formerly connected with the Albany Kelvinator organization when it was a subsidiary of the Syracuse office, leaving to become the sales manager of another company.



Intelligent prospects are not deceived. They know these things and they judge refrigerator values by the unseen factors. The most important of these is insulation. Corkboard insulation is the strongest selling argument you can use.

"Insulated like a cold storage room—with corkboard," insures protection to you and satisfaction to your customers. Armstrong Cork & Insulation Company, 917 Concord Street, Lancaster, Pennsylvania.

## Armstrong's Corkboard Insulation

For Commercial and Household Refrigeration

## MILK COOLING UNITS GAIN IN POPULARITY

Harrisburg, Pa.—Proper cooling of milk immediately after it is drawn from the cow is a much discussed subject on eastern farms, and electric milk coolers attracted much attention at the 14th Annual Farm Products Show here the third week in January.

L. L. Pratt, who represented the G. E. line of refrigerators here and at the New Jersey show the week before in Trenton, said that two out of every three interested prospects he talked with were concerned with milk more than household refrigeration. His company had an extensive display with three large hotel units, four household size, one milk cooler, and a water cooler.

E. A. Kaestner, Baltimore, Md., and Esco Cabinet Company, West Chester, box manufacturers, also had attractive displays.

Frigidaire displayed a milk-cooling outfit. The Wolfe Engineering and Manufacturing Company, of Harrisburg, also showed a milk cooler.

Dr. Clyde L. King, Philadelphia, is quoted as saying that within the next five years it will be necessary for every dairyman selling raw milk to be equipped with electrical refrigeration on the farm.

## WALLIS NAMED GENERAL MANAGER OF CHICAGO CO.

Chicago, Ill.—George E. Wallis has been appointed general manager of Creamery Package Mfg. Co., succeeding E. W. Chandler, who has retired from the active direction of the company, but continues as president. Mr. Wallis was formerly Eastern director of sales, with headquarters in Boston, Mass.

Mr. Wallis graduated from the Massachusetts Institute of Technology in 1909. After two years on the instruction staff at the University of Michigan, he entered commercial work and in 1916 became affiliated with the sales force of the Creamery Package Mfg. Co., at New York, serving as salesman, office manager and divisional director of sales.

### COLUMBUS MERCHANTS INSPECT DAYTON PLANT

Dayton, Ohio—Thirty leading Columbus merchants were in Dayton on January 15 visiting the factory of Frigidaire Corporation.

In the morning they were taken for a tour of the Taylor St. plant, and then were guests of the corporation at lunch held at the Engineers' Club. In the afternoon they went to the Moraine plant, where they inspected the assembly lines, porcelain plant and other interesting features. The evening program included a dinner at the Van Cleve Hotel.

J. J. Munsell, Columbus distributor for Frigidaire Corp., accompanied the merchants to Dayton. C. A. Copp, assistant to the president; B. J. Vandore, assistant sales manager; H. C. Jamerson, assistant sales manager, and other Frigidaire officials met the visitors.

*"It was built by BOHN"*



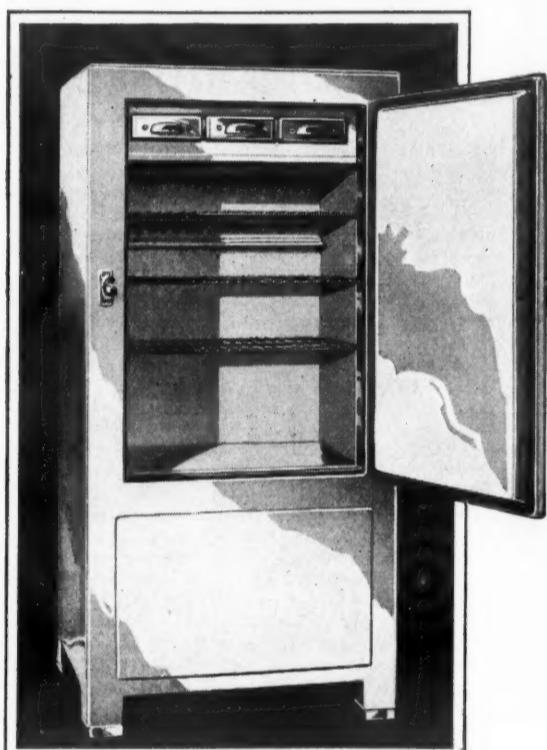
The handy base cabinet may either be used for refrigerating machinery or the storage of cooking utensils, canned goods, vegetables, etc.

BOHN REFRIGERATOR COMPANY  
SAINT PAUL, MINNESOTA

Write for details of the remarkably low prices that are now prevailing.

**"This new principle  
is staggering in its significance"**

Hydelectric  
Refrigeration



WELS BACH  
Hydelectric Refrigeration  
Welsbach Hydelectric Refrigerator, Model  
C-2060. New beauty, new quietness. Shelf area of  
an 8-foot box—all within exterior dimensions of  
a 5-foot box!

**H**YDRELECTRIC refrigeration! A new principle that solves the de-hydration problem and simultaneously insures faster freezing of ice cubes—mark this, ice cubes in half the time without acceleration of any sort; without increasing the monthly electric bill; and without altering the food compartment temperature! In the New Welsbach Hydelectric Refrigerator, the cube compartment is insulated away from the food section. It has but one duty to perform—quick freezing of ice cubes and desserts.

The new Welsbach Hydelectric Refrigerator automatically hydrates the food compartment. It keeps foods in their natural state. It does not dry out

cooked or uncooked foods. Celery, lettuce, salad greens and similar perishables that you have so apologetically told prospects and customers must be kept covered, are now kept fresh, crisp, firm and tender in the Hydelectric. Consequently, covered refrigeration dishes are unnecessary . . . Another point, the natural juices are not drawn from foods and deposited as frost on the cooling unit.

All the salient features of the famous Welsbach Low Pressure System have been retained—single piston double acting pump, flooded lubrication, slow speed, ideal refrigerant and one piece steel cabinets. Attractive chrome-plated hardware.

Applications for franchises will be handled in order received. Write, wire or 'phone. All communications will be answered.

**W E L S B A C H**  
**C O M P A N Y**

**Gloucester City (near Philadelphia) New Jersey**

## FOR CHICAGO'S HEALTH



Courtesy Public Service Leader

Dr. Kegel's Domestic Refrigeration ordinance is a health measure of the first quality. It directly affects the welfare of a large percentage of homes and eventually will reach every home. Think of how grateful those poor victims would be, had this health measure been in effect two years ago.

Mothers today realize that Dr. Kegel is guarding their health and the food that goes into the mouths of their children. Years from now babies, as grownups, can thank him and as years go by and other cities pass a similar ordinance we will more fully know what it means as a health measure. The far-sightedness of Dr. Kegel is again demonstrating itself in the "Ice Box Ordinance." Brought about by a catastrophe affecting the health of the people, he foresaw the problem and the entire health department had no rest until the ordinance was completed. Again let it be said—"The good health of Chicago will forever stand as a monument to the Health Department and the Doctor at its head."

### The Chief Answers the Junior Salesman

**"What is the big advantage of corkboard insulation?"**



**Moisture resistance makes corkboard the best insulation for automatic refrigerators.**

**But to customers you can put it in terms of:**  
**Faster freezing,**  
**Constant Cold,**  
**Lower operating expense**  
**and longer life.**

**These strong selling points are the result of corkboard's permanent resistance to moisture.**

**Every customer wants what corkboard insulation gives.**

## Novoid Corkboard Insulation

CORK IMPORT CORPORATION

345 W. 40<sup>th</sup> ST. NEW YORK

"Permanent Protection for All Refrigeration"

The night students are employed elsewhere, taking advantage of our training to investigate what has impressed them as being a particularly attractive field.

"But here is where we get the measure of our men. The notes they put in their note books. We go through the note books they leave with us. What impresses a man, we have found to be an excellent measuring stick of his ability, and his type of ability; what division he is best fitted for. If he shows he has a mechanical mind, we know he is best fitted for wholesale, commercial or apartment house work.

"After a few weeks of school, we conduct a slight examination. To the men we have previously determined were good enough to become successful salesmen, we give an application blank, inviting them to join our selling organization if they wish. No obligation to them. Just a matter of expression of confidence in them.

"Since everybody doesn't receive an application, but only a few, the thing stimulates interest in everybody. The others think, 'Gee, maybe if I get busy they'll invite me.'

"Of course, the first question of a man is whether he must do canvassing. Next he wants to know if he must work on strictly commission. We don't attempt to go around the bush, but flatly admit that canvassing is a dignified effort, for it is a matter of contacting prospects as such as every business man must do in some form or another.

"As far as commission is concerned, we explain that every man's time must have some cash value. What's the difference whether we estimate the value of a man's time, or he does it himself? If we do it by paying a salary, we must take off 4 per cent to allow for our errors in judgment. If he does it himself on commission, he is ahead that 4 per cent. Few men fail to see the good business of it.

"To take care of the man who has trouble getting started, we keep a reserve fund for just such needs. Last year it was \$2,000. And we didn't lose a penny of it. Every man who borrowed from it paid back his debt through earnings. In addition, we cleaned up a \$1,900 deficit from 1928 that had carried over.

"To help keep our men going, we give them what we call a work-sheet every morning, containing 25 names to whom a card has been mailed 24 hours before, announcing their visit. We require each man to report on his day's visits and at the end of the week give us a summary of each day on a separate card. "When a man's weekly summary shows that he only called on 49 of the 25 given to him each day, that he had the opportunity to make 29 approaches, succeeded in interesting 21 of them, came close to closing five, but only actually closed two, I know he could have done better. In this way it is possible to keep my fingers on a sales organization of 75 as easily as ten."

### PETER NEFF, PIONEER ENGINEER, IS DEAD

**Canton, Ohio**—Peter Neff, 67, one of the oldest and most widely known mechanical refrigeration engineers in the country, died at his home here, Feb. 4. Mr. Neff took up mechanical refrigeration in 1886, following his graduation from Western Reserve at Cleveland. He joined the Arctic Ice Machine Company of Cleveland, becoming chief engineer of the company, and moved the plant to Canton, continuing as its head until 1912, when he resigned to become a consulting engineer and specialist in refrigeration. He was a charter member of the American Society of Refrigeration Engineers, and in 1913 was president of the society.

During the World War Mr. Neff acted in an advisory capacity in aiding the government in food conservation. Mr. Neff was active in Episcopal church circles in his local diocese, and was as well known throughout the Episcopal church world for his untiring faithfulness in church work as he was throughout the refrigerating world. His life was divided between two enthusiasms: his refrigeration business and the Episcopal Church, of which he was a prominent member. Mr. Neff leaves a wife, two children and five grandchildren, and two sisters.

### COPELAND ADDS SIXTY NEW SALES OUTLETS

**Mt. Clemens, Mich.**—Sixty new sales outlets, including 11 distributors and 49 dealers, have just been added to the dealer organization of the Copeland Sales Company, according to announcement by W. D. McElhinny, vice-president. New distributors include The Radio Supply Co., Baltimore, Md.; Auto Supply Company, Hutchinson, Kans.; B. O. R. Radio Co., Inc., Reading, Pa.; Domestic Specialties Co., Ltd., San Francisco; Tulsa-Copeland Refrigeration Co., Tulsa, Okla.; J. W. Newcomer Co., Wheeling, W. Va.; Warren-Whaley Electrical Co., Norfolk, Va.; City Ice & Fuel Co., Flint, Mich.; Fiske Radio Supply Co., Albany, N. Y.; S. O. Lindeman, Greensboro, N. C.; Murray-Winerich, San Antonio, Tex.

"We call the roll each school night by handing out note books with their names on them. In that way we check attendance. The books must be left with us at the end of the evening. Moving pictures and illustrated lectures are used, covering refrigeration as a necessity from health standpoint, selling by using the user, tools needed to work with, and other vital selling subjects. "We employ a man who devotes his entire time to these night classes, as well as our day classes for salesmen.

## BIG PACKERS SEE RETURN OF PROFITS VIA QUICK FREEZING

**F**OR years the packing industry has been in the doldrums and a revolution is brewing in the distribution and sale of meat. New fashions in dress and diet have cut down per capita consumption of meat, and with less business have come diminishing margins of profits," says Karl M. Elish in the February 5 issue of *Advertising and Selling*, in an article entitled "The Packer Turns Meat Cutter." "In 1927, the last year for which figures are available, profits for 611 leading packing plants were only 3.94 per cent of the net worth of the concerns, and only 0.99 per cent on a year's business of some \$3,000,000,000."

Aroused by this situation, Mr. Elish points out, the best brains of the packing industry have been studying the methods of successful merchandisers in other fields. The success of standard brands of merchandise, wrapped in packages and extensively advertised has been manifested to them. The leaders of the packing industry, know from their own experience with packaged bacon, advertised and sold under trade names, that the housewife appreciates the advantages of a meat product delivered to her in an original package.

"As a result, plans are now being made by the leading packers of the country to bring the most popular cuts of meat to the housewife in packages sealed at the packing plant. Recent developments in refrigeration have made it possible to freeze meats without any of the objectionable results which attended the older methods of meat freezing, and the frozen product can now be as attractive as meat in its natural business.

"The American meat shop is going to see some strange changes in the next few years. The carcasses and sides of meat which now constitute the principal scenery will be gone. In their place will be seen only frozen cuts, attractively wrapped in cellophane or glassine and labeled with the name and trademark of the packer. This change spells the swan song of the 'butcher,' whose skill in meat cutting is now essential to the prosperity of the store. That special skill will be provided by the packers in their own plants, and the retail meat store will require only salesmen.

"Not only will the store look different. The housewife will order differently. Instead of saying, 'Three pounds of sirloin steak, and be sure it's nice,' she'll ask for 'a three-pound package of Blank's sirloin steak, please,' and will let the trademark guarantee the quality.

"Although the packaging of fresh meat is still in the experimental stages, the following cuts of frozen meat are already ready being sold in packages by various packers:

Pork chops  
Pork roasts  
Lamb chops  
Legs of lamb  
Lamb shoulder roasts  
Lamb stew  
Porterhouse beef steaks  
Rib roasts  
Club beef steaks  
Pin bone beef steaks  
Sliced calf liver  
Whole chickens, drawn  
Half chickens, drawn  
Calf sweetbreads  
Calf brains  
Round steaks  
T-bone steaks  
Sliced beef livers  
Breast of lamb, rolled  
Lamb loin roasts, rolled  
Pork tenderloins.

"By making these standard cuts of meat readily available to the housewife in attractive, sanitary packages, the meat industry hopes to induce her to buy more meat, and thus to restore the per capita consumption of meat to something like the figure of 149.7 pounds which obtained in 1924, instead of the 138 pounds eaten in 1928.

"Since meat cutting skill will no longer be required by the retailer, the sale of meat will be possible in any quarters equipped with properly refrigerated showcases and coolers. Grocery stores generally may therefore be expected to go into the merchandising of meat, while conversely the meat merchant in self-defense will undertake the sale of other food products on even a larger scale than at present.

"It is not unreasonable, in fact, to imagine that with meat available in standard qualities and packages, automatic coin-in-the-slot merchandising machines will largely supplant the human salesmen."

In closing, Mr. Elish quotes opinions of four prominent officials in the packing industry, all of whom see great acceptance of frozen meats in package form by the housewife.

# KELVINATOR

*The Only Electric Refrigerator  
that provides  
Four Automatic  
Refrigeration Services*

1. *Automatic Fast Freezing of Ice and Desserts*
2. *Automatic Normal Freezing*
3. *Automatic 40 to 50 Degree Food Compartment*
4. *Automatic Cold Storage Compartment*

**K**EVLINATOR dealers occupy a unique position in the industry in selling the only electric refrigerator that provides the four refrigeration services essential in the home. The Super-Automatic Kelvinator is literally *four* refrigerators in one—each operation completely automatic and independent of the others. No other electric refrigeration manufacturer has so closely approached the ultimate goal of convenient, reliable, automatic electric refrigeration for the home, as has Kelvinator in this new line.

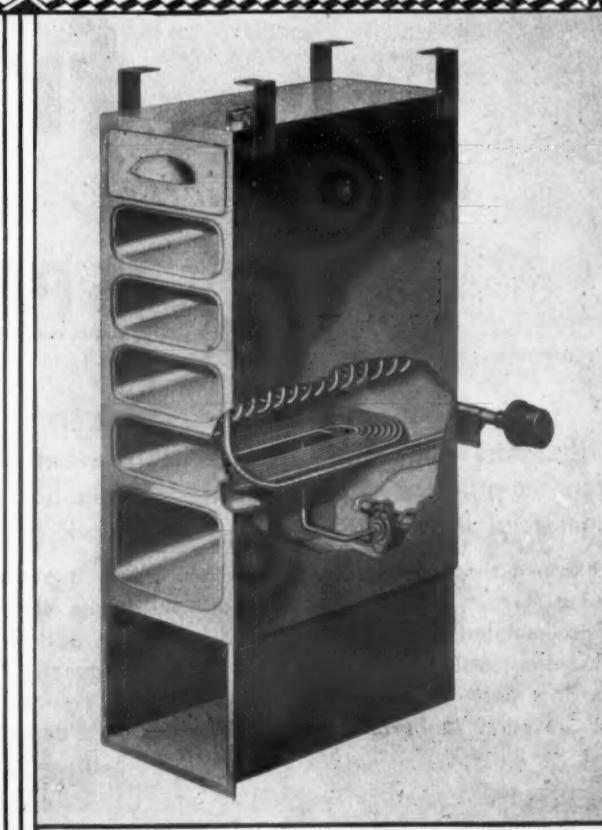
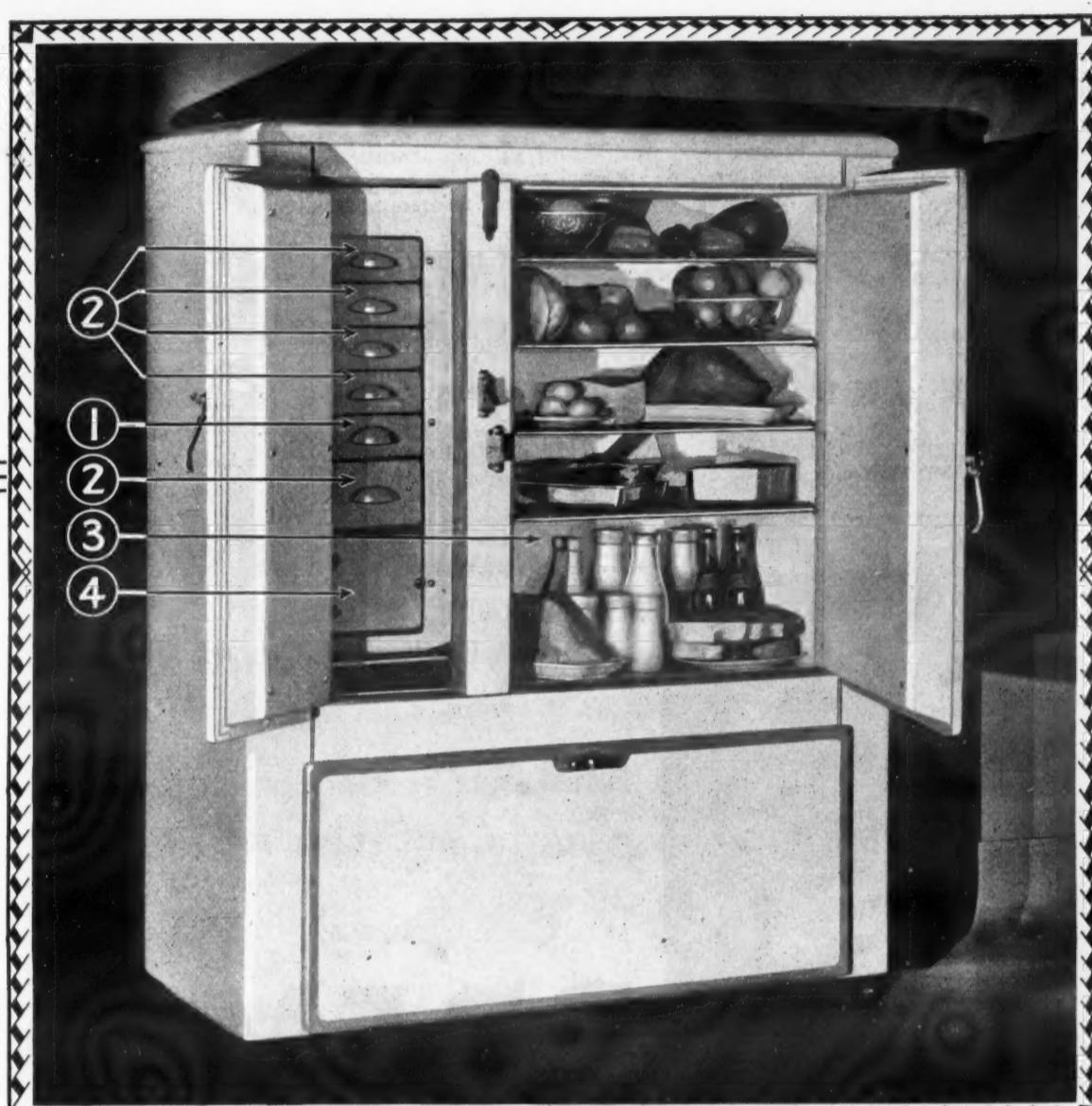
1. *A Fast Freezing Compartment*—operating automatically, for producing ice cubes, ices and frozen desserts in *half the usual time*. Merely inserting the tray starts fast freezing operation in the Iso-Thermic Tubes. No attention or regulation is necessary. When the material is frozen, the freezing operations automatically cease.
2. *A Normal Freezing Chamber*—operating automatically, for making ice cubes, frozen desserts, etc., in the usual time.
3. *40 to 50 Degree Food Compartment*

*Compartment*—likewise operating automatically, always maintained at the correct temperature for proper preservation of foods.

4. *Special Cold Storage Compartment*—in the larger models, at “*below-freezing*” temperature, for keeping frozen fruits, meats and game over a long period of time.

With these exclusive features, plus the reliable, time-tested, *quiet* Kelvinator compressor unit, plus the unique Kelvinator Cold-Keeper which cuts down the number of operating periods fully a third, plus Kelvinator’s all-porcelain-lined cabinets that will last a lifetime—it is easy to see why Kelvinator dealers stand in an impregnable position in the sale of domestic electric refrigeration.

Backed by the oldest and greatest name in electric refrigeration, the Kelvinator franchise represents a selling opportunity without a parallel in the industry. Write or wire for complete information on the Kelvinator line.



*Iso-Thermic Tubes for Automatic Fast Freezing*

Here is a feature that will appeal to every user of electric refrigeration—a special Kelvinator compartment that gives extra-fast freezing, automatically. Note the spiral coil of Iso-Thermic Tubes. This is, in effect, a Cold Plate, in which intense cold is concentrated. Ice cubes and desserts are frozen in half the usual time. Yet food compartments are not affected.

**KELVINATOR SALES CORPORATION, DETROIT, MICH.**  
KELVINATOR OF CANADA, LIMITED, WINDSOR, ONT.

KELVINATOR LIMITED, LONDON, ENGLAND

## INSULITE

*the Wood-Fiber Insulating Board*

### Plays its part in NATIONAL FOOD PRESERVATION

**I**N THE worthy movement for health protection and economic saving by the elimination of food spoilage, Insulite plays an important part.

Today foods are transported great distances and railroad refrigerator cars must be efficiently and strongly insulated to stand up in this trying service. More than 46,000 such cars are insulated with Insulite—and no replacements have ever been required.

In the cold storage plant Insulite has proved its efficiency year after year. Continuous high insulating efficiency, without rot or disintegration, recommends this strong, all wood-fiber board as a permanent, effective storage plant insulation.

Because it is efficient insulation—light in weight but of great structural strength—because it is odorless and will not absorb odors—because it is not subject to rot or deterioration, Insulite is now the choice of cabinet refrigerator manufacturers in every section of the country.

The use of Insulite in cabinet construction means strong, durable cabinets and faster production as it is furnished cut to size, ready to apply.

Let us send you samples and complete data.

### THE INSULITE COMPANY

*(A Backus-Brooks Industry)*

1200 BUILDERS EXCHANGE, Dept. 30B  
MINNEAPOLIS, MINN.

737 CONWAY BUILDING  
CHICAGO, ILLINOIS



The No. 149 Airswitch —  
a necessary part of every  
commercial refrigerating  
system.



## PREVENT freeze-ups with this SPECIAL CONTROL

**P**LACED IN SERIES with the operating controls in commercial refrigerators—the No. 149 Airswitch prevents freeze-up of the cooling box by cutting out the unit when an efficient degree of refrigeration has been reached. It is an ESSENTIAL part of every commercial installation . . . in meat markets . . . florist cabinets . . . cold storage rooms . . .

Its extreme simplicity of construction guarantees dependable operation, long life, and freedom from service. Its Con-Tac-Tor Mercury Switch is mounted directly on the bimetallic element. There are no other moving parts to be retarded by accumulated frost . . . The No. 149 Airswitch operates over a wide range from—10° to + 60°. It will maintain temperature within a variation of 5° and is frequently used as an operating control . . . The No. 149 Airswitch is an important part of Time-O-Stat's famous line of automatic refrigeration controls . . . All have been perfected in Time-O-Stat's research laboratories. They form the most dependable line of automatic controls in the refrigeration industry.

For full information on these products, or on any problems of automatic control—write the Time-O-Stat Controls Company.

**TIME-O-STAT**  
CONTROLS COMPANY  
ELKHART, INDIANA

Branch Offices and Exclusive  
Distributors in all principal  
cities of the United States.

Canadian Distributors—  
Toronto and Montreal



Manufacturers of AUTOMATIC CONTROLS for Oil Burners — Gas Burners — Coal Burners — Electric Refrigerators — Furnace Fans — Mechanical Stokers — Industrial Ovens — Ice Machines — Unit Heaters . . . also of Sign Flashers — Mercury Switches — Electric Heaters — Corrugated Metal Bellows.

## Famous Monks of St. Bernard's Pass Purchase Electric Refrigerator



The Hospice and Monastery of St. Bernard, known the world over. Some of the heroic dogs which have helped Alpine travelers may be seen.

By Dorothy Dignam

CONCLUSIVE evidence that winter weather and a cold climate can never substitute for mechanical refrigeration in the preservation of food is presented by the recent installation of "cold equipment" at the famous St. Bernard monastery in one of the highest passes of the Alpine range. Here winter temperatures often keep the thermometer around 40 below, and summer consists of only a few weeks of mid-day warmth.

Two refrigerator salesmen on skis booked this remarkable order. Their sales trip carried them from Geneva, Switzerland, up into the St. Bernard pass, which lies in the heart of the Alps between France and Italy. In this pass stands the St. Bernard Hospice—a guesthouse for Alpine travelers conducted by the Franciscan fathers. It is this spot that has given its name to St. Bernard dogs, and this heroic breed is still used to locate and rescue climbers who are reported missing or in difficulty.

The Hospice is hundreds of years old and was Napoleon's headquarters on his great march over the Alps.

The food problem at St. Bernard had to do with the meat supply. During the frozen months no fresh meat could be brought up the steep trail from the village below, so that natural ice stored

With this big-capacity cabinet for storage purposes—it holds 600 kilograms of beef—the fathers do their own butchering and enjoy a good steak several times a week. Their guests also share in and appreciate the benefits of the new arrangements.

"Thank goodness we don't have to do any servicing on that job," says Henri Moraz, Frigidaire representative who closed the sale. "The trip takes about two days each way by motor and ski, and the hospitable fathers are so proud of their new culinary equipment that you must always allow time for some extra entertainment."

### TO REPRESENT KELVINATOR ON ZANZIBAR ISLAND

The Messrs. Karimjee Jivanjee & Co., established in Zanzibar in 1825, are now distributors for Kelvinator. Zanzibar is an island off the coast of East Africa and is a British protectorate. This firm is managing proprietors of some fifteen sisal, coconut, kapok, coffee, rubber and fruit estates, ranging between Dar es-Salaam, Lindi, Mikindani, Tanga and Korogawe. They deal extensively in copra, cloves, ivory, rhino horns, gum arabic, tortoise shell, hides and skins, sisal, mace, coffee, kapok, copal, ground nuts, mangrove bark and hippo teeth, oils, and leading manufactured products of the United States, such as typewriters, lead pencils, stoves, paints, house hold wares, etc.

### FANNING PROMOTED BY TOLEDO DEALER

**Toledo, Ohio**—J. E. Fanning, who has been identified with the commercial electrical division of the Toledo Edison Co., local Frigidaire dealer, has recently been made manager of the refrigeration department.

Mr. Fanning reports that the following contracts were recently awarded to the Toledo Edison Co. for Frigidaire installations: 16 individual water cooling units in the plant of the Libbey-Owens Sheet Glass Co., 57 Frigidaire in the Ann Manor Apartment Hotel, and a \$30,000 commercial Frigidaire installation for the Hillcrest Arms Apartment Hotel coffee shop.

### HALLOCK HEADS A. G. A. REFRIGERATION MEN

Henri Moraz and his Franciscan hosts.

In a cave had been resorted to for the necessary preservation of an entire winter's meat supply. But the moisture was too great for the meat, and if the fresh sides of beef were left outdoors to freeze, the meat was much altered in flavor and texture. Once cooked it had to be consumed immediately or destroyed. For long weary months the Hospice was virtually on a vegetarian diet—not altogether satisfying to the rugged fathers leading their vigorous outdoor lives.

The problem has been solved by choosing a local Swiss-made cabinet of seven cubic meter capacity, into which Agence Americaine of Geneva fitted a Frigidaire vertical fin cooling coil operated by a Model N 1/2 H. P. Frigidaire compressor. Power is obtained from a private generating plant which the Hospice has been operating for several years. The temperature control is adjusted to 36-40 Fahrenheit. This is an outstanding example of an installation where an air-cooled compressor was necessary—the water supply is frozen tight for a good part of the year. Water-cooled compressors are popular in Switzerland as a rule, however, as the ordinary hydrant is always cold.

**Brooklyn, N. Y.**—R. L. Hallock of the Brooklyn Union Gas Company, has just been appointed national chairman of the Refrigeration Committee of the American Gas Association. Mr. Hallock, long a staunch advocate of gas refrigeration, is responsible for many of the large Electrolux installations in the metropolitan New York area.

George Roberts, head of the refrigeration department of the Philadelphia Gas Works Company, has also been elected a member of this committee.

### FERRO MAN ADDRESSES U. OF I. STUDENTS

**Urbana, Ill.**—J. E. Hansen, Research Engineer for The Ferro Enameling Co., Cleveland, Ohio, presented three lectures at the University of Illinois, on January 31, in connection with short course in ceramics given by the university. The lectures by Mr. Hansen were upon the subjects of "Wet Process Vitreous Enamel Application," "Wet Process Enamel Calculations" and "Correct Methods for Firing Vitreous Enamels Parts."

## WHITE HOUSE OFFICE SOON WILL HAVE NEW AIR COOLING SYSTEM

**Washington, D. C.**—In restoring the interior of the White House Executive Office Building, badly damaged by fire, an air-conditioning system is being installed which will manufacture weather of the right temperature and relative humidity, no matter how uncomfortable it may be out of doors. A brief reference was made to the places for their installation in the Jan. 15 issue of ELECTRIC REFRIGERATION NEWS.

The Executive Office Building is not large, and the expanding office force already fills it unduly. Sometimes as many as two hundred visitors are crowded in among the staff. This makes it uncomfortably hot in summer and excessively stuffy in winter, exposing visitors and the staff to colds and respiratory infections.

The new system's more spectacular service will be to keep the building cool and comfortable during the eight hot months of the Washington year, but its function in winter will be no less important, for it will protect the occupants from the effects of improper ventilation and over-heated dry air. The windows will be kept closed the year round, thus excluding noise and dust, yet the manufactured weather inside will be maintained, by automatic thermostats and humidity regulators, like that of a spring day, with a relative humidity around 50 per cent.

The decision to put air conditioning in the Executive Offices had been made before the fire. It had been planned to install the apparatus and the air ducts piecemeal during any absences of Mr. Hoover this winter and spring. The fire gave the engineers the opportunity to do a thorough and speedy job, and to build the air ducts exactly where they wanted them in the new partitions and floors.

The system was designed by the Carrier Engineering Corporation of Newark, N. J., which also designed and installed the air-conditioning plants in the Capitol for the House and the Senate chambers.

Outdoor air will be brought through an intake under the back stoop of the building, drawn through a filter which will remove dust, soot and germs, then blown through a chamber filled with atomized water. This washes out the last of the foreign matter and, through control of the temperature of the water, adds humidity when the heated air would be too dry in winter or precipitates out excess moisture when it is too humid for comfort in summer. To chill

this spray water when humidity must be taken out of the air, an electric motor-driven Carrier centrifugal refrigerating unit, supplying the equivalent of 30 tons of ice melting each 24 hours, will be installed in a small room excavated under the front steps of the building. The rest of the apparatus goes into one corner of the existing basement. There will be no exposed pipes or ducts upstairs, the air coming in near the ceilings of the offices through openings concealed by ornamental plaques that blend into the decorations and being exhausted through inconspicuous grilles near the floor level. The whole system is being soundproofed so that there will be no mechanical noise from it audible in the offices, and so that the air ducts will not transmit sound from office to office.

The Executive Office Building job illustrates the advance made in heating, cooling and ventilating during the twenty-odd years since it was built, in the Roosevelt administration. The most modern improvement then was steam heat; to cool and de-humidify air in summer was considered impractical. During the Taft administration the problem was tackled with a device more ingenious than successful, whereby air was blown through racks holding big cakes of ice, and then passed across trays of chloride of lime, which theoretically should have removed the excess humidity but actually did not, to any extent.

### SAWYER NOW IN CHARGE OF CLEVELAND ELECTROLUX DISTRIBUTION

**Cleveland, Ohio**—Earle M. Sawyer has been appointed as manager of the Electrolux refrigerator department of Smith and Oby Co., 6103 Carnegie Ave., distributors here. Mr. Sawyer was formerly connected with the Philadelphia Gas Works Company, and has had several years' experience in refrigeration sales work.

Mr. Hitchcock, Electrolux salesman, who won the zone prize for individual sales during the month of December, has also been appointed as assistant manager in Mr. Sawyer's department.

### CANADIAN OFFICIAL VISITS KELVINATOR PLANT

**Detroit, Mich.**—Don T. Kelley, advertising manager of Kelvinator of Canada, Ltd., a recent addition to the London, Ont., organization, made his first visit to the factory on Jan. 13. He made a tour of the factory and all departments with Earl Lines, advertising director. Mr. Kelley is editor of the Kelvinator in Canada, the first issue of which made its appearance recently.

## Food Preservation Boosts Sale of Refrigerators in Tropics

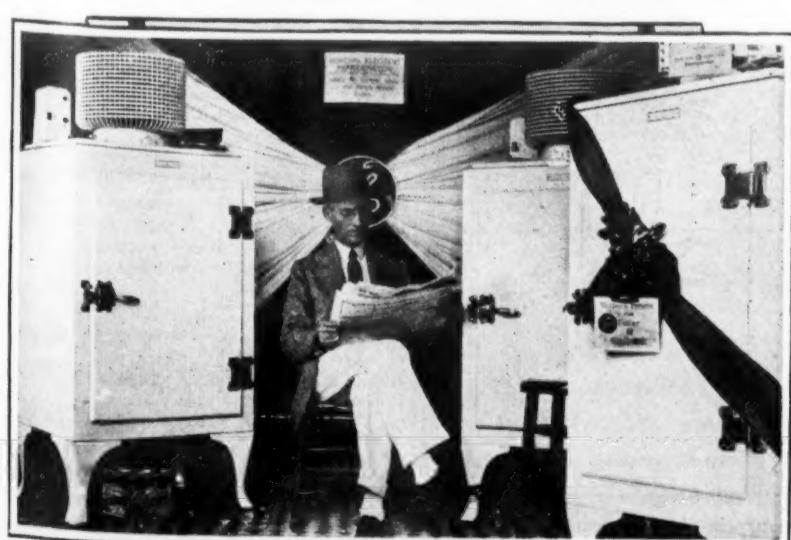


Dividing a large and impressive booth at the Barbados Industrial Exhibition into three sections, John F. Huston made General Electric refrigerators a prominent feature.

The first section of Mr. Huston's display showed a model kitchen, the sec-

ond, the type of good food to be used in it, and the third, the proper means of preserving it. That's where the G. E. refrigerators came in.

Two five-gallon bottle water-coolers stood guard and dispensed chilled water to the interested passerby.



.12' to .08  
85% of total Heat  
entering Cabinets comes through  
the walls, top and bottom

If incoming heat is sufficiently reduced manufacturers can enjoy the advantages of:

Smaller Motors and Machines

Lower Manufacturing Costs

Higher Efficiency

Lower Operating Costs

Point-One-Two is the *limit* heat entry permitting these advantages — Point-O-Eight permits their full realization.

### ACTUAL VALUES

from tests by impartial authorities such as U. S. Bureau of Standards, Armour Institute, State Universities, etc.

MATERIAL	WT. CU. FT.	INSULATION VALUE	ABSORPTION <sup>*</sup>
DRY-ZERO	2 lbs.	4.15 to 4.3	14
Corkboard	9.5 to 13 lbs.	2.9 to 3.3	28
Wood fibre board	13 lbs.	2.9 to 3.2	115
Flax fibre board	13 lbs.	3 to 3.2	66
Cane fibre board	15 lbs.	2.7 to 2.9	78
Mineral wool slab	17 lbs.	2.6 to 2.8	

<sup>\*</sup>Tests run at University of Minnesota

DRY-ZERO CORPORATION, 130 North Wells Street, Chicago, Illinois

**DRY-ZERO**  
THE MOST EFFICIENT COMMERCIAL INSULANT KNOWN

# ELECTRIC REFRIGERATION NEWS

The Business Newspaper of the Refrigeration Industry

PUBLISHED EVERY TWO WEEKS BY

BUSINESS NEWS PUBLISHING CO.

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## Controlling Humidity

ACH year sees further improvements and refinements in the electric refrigerator. The industry, young in years but wise enough to profit by the experiences of other industries, is gradually working out its problems and giving the buying public better and more efficient machines. The problems are varied; some things crop up as problems that only a short time ago were thought to be of no great importance, and things that seemed vital are discovered by careful experimentation to be only minor factors.

Humidity, how much or how little dampness is desirable or necessary, presents a problem about which none too much is known, not only in the field of refrigeration, but in other human activities. Refrigeration engineers have been studying the varying effects of humidity on foods within the refrigerator, and at least two prominent manufacturers have brought out models this season which recognize the fact that even so healthful and bacteria-killing a thing as dry cold can be too dry for certain foods.

The vegetables have been the worst sufferers from the lack of moisture, and they become the first beneficiaries of the new equipment just put on the market. Different methods are adopted for preventing the vegetables from being robbed of their moisture, but the effect sought is the same. The vegetables emerge from the refrigerator with a crispness and succulence that delight the housewife.

It is by the development of just this sort of refinements that the refrigeration industry shows its progressiveness. The universal interest of the people of the United States in the electric refrigerator is largely due to the fact that the industry has been alive to its problems; that it has not been content with what has been accomplished, but is bending every effort to serve the public more thoroughly. It has advanced a step in that service by turning out refrigerators that will not only destroy bacteria, but will keep food in the most palatable form.

• • •

## Help the Census Bureau

IN extending its activities this year and making a national census of manufacturers and distribution a part of its decennial task, the United States Government has undertaken a work that will be of inestimable value to every industry. It will be particularly valuable to the electric refrigeration industry, which has not yet had time to acquire the background that makes it comparatively easy for other industries to obtain fairly adequate information covering the range of their activities. Many of the queries which are sent to the News show how anxious the men in this industry are to find out certain statistical information, and the answers in turn too often reveal how little reliable data exists.

The Census officials believe that the facts and figures they intend to collect will be of real value only if they are made available to the public within a reasonable time. Past experience has created among business men an unfavorable opinion of the Government's speed in issuing reports, and those now in charge are determined that this time, if it is humanly possible, the tabulations will be issued promptly. To that end elaborate arrangements have been made for collating and analyzing the material obtained in a remarkably short space of time.

But no matter how elaborate the arrangements, the machine cannot function unless it has material to work on. And in the past the business men of the country have been disgracefully slow in furnishing the data asked of them. Down at the Census Bureau they tell, more in sorrow than in anger, of the president of a nationally famous manufacturing organization, who wrote a caustic letter asking why the Census Bureau was so slow in getting out some figures that he needed in his work. The reply informed him that data from every company in the industry but his own had been in the hands of the Bureau for several months, and that publication of the figures he required was awaiting only the data he had failed to send in. The moral is evident.

## Big Seattle Market Has Electro-Kold Equipment



Broadway Market Co., Seattle, Wash., has been equipped by the Seattle branch of Electro-Kold. Five compressors cool the equipment in this large market.

### CORRECTION

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY

February 3, 1930.  
Electric Refrigeration News,  
Detroit, Michigan.

You certainly have presented Westinghouse with a very fine story in your most recent issue of ELECTRIC REFRIGERATION NEWS. But the statements concerning general distribution during 1930 in such cities as Philadelphia, Washington, Chicago, and other cities are not accurate, and distribution will probably be limited to the distributor's listing in your story.

Because of this inaccuracy, many people will write to us from the cities you mentioned and where we will have no distribution, I am asking you to publish a correction in your next issue. I am sure that you will be glad to work with us, giving the correct information.

Very truly yours,  
RALPH GATES,  
Manager, Refrigeration Sales  
Promotion Section.

### COMBINATIONS

A GREAT deal has been heard about the possibilities of combining radio retailing, with its natural peak period coming at the other end of the year from the electrical refrigeration peak, and this self same refrigeration business into a flourishing combination of endeavor for the merchant. The experience of men who have set out to operate a business based on retailing radio and refrigeration is probably not yet conclusive enough definitely to tag the idea either as excellent or just another one of those ideas which sound well but don't work out so happily.

Another idea which seems to have at least as much merit is the combination of refrigerators with health appliances. The former device naturally flourishes at its greatest rate at the other end of the calendar from the months when such a device as a sun lamp may be sold with a minimum of resistance on grounds of weather and when the exerciser is a blessing to the golfer deprived of his eighteen holes.—*Electrical Dealer*.

## FOREIGN SHIPMENTS OF ELECTRIC REFRIGERATORS

December Exports Reported by Bureau of Foreign and Domestic Commerce

Country Destination	No.	Units	
		Up to $\frac{1}{4}$ Ton Capacity	Over $\frac{1}{4}$ to 1 Ton Capacity
Austria	5	185	...
Belgium	28	5,092	20
Denmark	2	451	...
Finland	3	743	...
France	14	3,337	8
Germany	31	3,522	65
Gibraltar	1	445	...
Greece	...	...	895
Italy	28	2,643	10
Netherlands	13	1,228	...
Poland and Danzig	5	783	...
Portugal	4	1,323	...
Spain	13	3,192	...
Sweden	80	4,135	...
Switzerland	23	3,062	...
United Kingdom	277	28,017	3
Canada	299	43,893	56
Costa Rica	1	250	...
Guatemala	1	128	...
Honduras	4	916	...
Panama	49	10,846	8
Salvador	7	1,455	...
Mexico	60	12,910	3
Bermudas	13	2,498	3
Trinidad and Tobago	1	246	...
Other British West Indies	9	2,022	2
Cuba	222	41,450	4
Dominican Republic	37	8,863	...
Netherland West Indies	17	3,058	...
Haiti, Re- public of	3	475	...
Argentina	155	15,256	...
Brazil	67	11,249	...
Chile	7	1,492	...
Colombia	6	982	...
Ecuador	10	2,541	...
Paraguay	2	366	...
Peru	13	852	3
Uruguay	90	18,047	2
Venezuela	83	7,574	5
British India	238	43,615	...
British Malaya	98	12,001	3
Ceylon	20	4,057	1
China	2	207	...
Java and Madura	12	1,430	...
Other Nether- land East Indies	3	424	...
French Indo- China	1	354	...
Hong Kong	12	2,430	...
Japan	121	6,360	4
Philippine Islands	72	5,522	3
Australia	875	86,661	51
British Oceania	12	678	...
French Oceania	1	255	1
New Zealand	119	9,355	4
British Africa	13	1,849	...
Union of South Africa	412	73,677	...
Gold Coast	14	2,181	...
Algeria and Tunisia	3	280	...
Madagascar	1	320	...
Morocco	4	365	...
Mozambique	2	660	...
Canary Islands	17	4,385	...
Total	3,735	\$503,421	262
			\$68,570

## The Byrd Expedition Runs Out of Ice Cubes



This cartoon, depicting embarrassing moments in the Antarctic, was taken from the Jan. 31 issue of Life.

## NEW LINE EXPLAINED TO BOSTON WELSBACH MEN

Boston, Mass.—The Welsbach Co., manufacturers of Welsbach low pressure electric refrigeration, held a refrigeration meeting at the showrooms of its distributor, the F. W. Webb Mfg. Co., 30-60 Elm Street, Wednesday, Feb. 5. The meeting was attended by nearly 150 dealers who handle the Welsbach product in the metropolitan Boston area and on Cape Cod.

The meeting was opened by H. W. Thorndike, president of the Webb Co., who greeted the dealers and expressed a most optimistic viewpoint with reference to the refrigeration possibilities for 1930.

Mr. Thorndike introduced J. M. Dierkes, district sales manager for the Welsbach Co. in New England, who talked on the proper presentation of Welsbach refrigeration, and announced the advent of the Welsbach line for 1930, which will embody an automatic fast freezing device and a completely automatic hydrating arrangement.

## WILLIS COMPANY TAKES OVER AKRON TERRITORY

Akron, Ohio—The Willis Co., Canton, Ohio, has taken over the distribution of General Electric refrigerators here and in surrounding territory. The local distributorship was formerly held by the H. G. Bogart Co., which has moved its headquarters to Toledo, from where it will continue to distribute General Electric refrigerators in northwestern Ohio, northern Indiana and southern Michigan.

The Willis Co. will also continue distribution in the Canton territory and will maintain branch stores at Youngstown, Ohio, and at Cuyahoga Falls, Ohio. The latter branch was opened by the Bogart Co.

The company is headed by D. H. Willis, who started in business with A. H. Willis 15 years ago in Canton. D. H. Willis has moved his family to Akron. H. H. Smith, of Canton, has moved here and will manage the local store. Mergers of the Akron and Canton territories makes this district nearly as large as the Toledo territory.

## WESTINGHOUSE SALUTE TO BE ON THE AIR TUESDAY

Pittsburgh, Pa.—J. C. McQuiston, general advertising manager of the Westinghouse Electric and Manufacturing Co., announces that the Westinghouse Salute, now an N. B. C. Wednesday evening program, will be changed to Tuesday, starting February 4. The program, one of the features of the National Broadcasting Company's coast-to-coast network, will be on the air from 10:00 to 10:30 p. m., Eastern Standard time. The change was made to better accommodate the vast army of listeners in the Middle and Far West.

## HARRIS COMPANY SECURES PUBLIC MARKET JOB

Portland, Ore.—Harris Ice Machine Works have secured the contract for refrigeration of the new public market at Seattle, and will put an anhydrous ammonia plant of 30 tons capacity, which will supply brine refrigeration to all the booths and showcases throughout the building. The work will be under the personal supervision of Maynard Cole.

## PACIFIC COAST MEN READY FOR REGIONAL MEETING

Seattle, Wash.—Some 800 Frigidaire salesmen from the key cities of the Pacific Coast will gather in the Civic Auditorium at San Francisco on February 21 for the annual regional convention.

Among the Seattle representatives to make the trip south are Grant Fink, manager, and S. A. Chrysler, sales manager.

## G. E. DISTRIBUTOR HOLDS OPEN HOUSE

Shreveport, La.—Food preservation and music were the features at an open house entertainment arranged by A. C. Riddick, Inc., distributors of General Electric refrigerators. J. C. Griffith, district manager, and T. B. Williams, sales manager, were in charge. Scottie Fontana and his accordion band furnished the music.

## SOUTHWESTERN MEN ATTEND SERVICE SCHOOL

Oklahoma City, Okla.—Under the instruction of field service representative H. H. McGehee a service school was conducted at the Oklahoma Gas & Electric Co., Kelvinator dealer, during the week of January 20. There were 31 members in the class.

# TEMPERATURE or TROUBLE?

## Fool-Proof Your Refrigerator with MUELLER BRASS FORGINGS

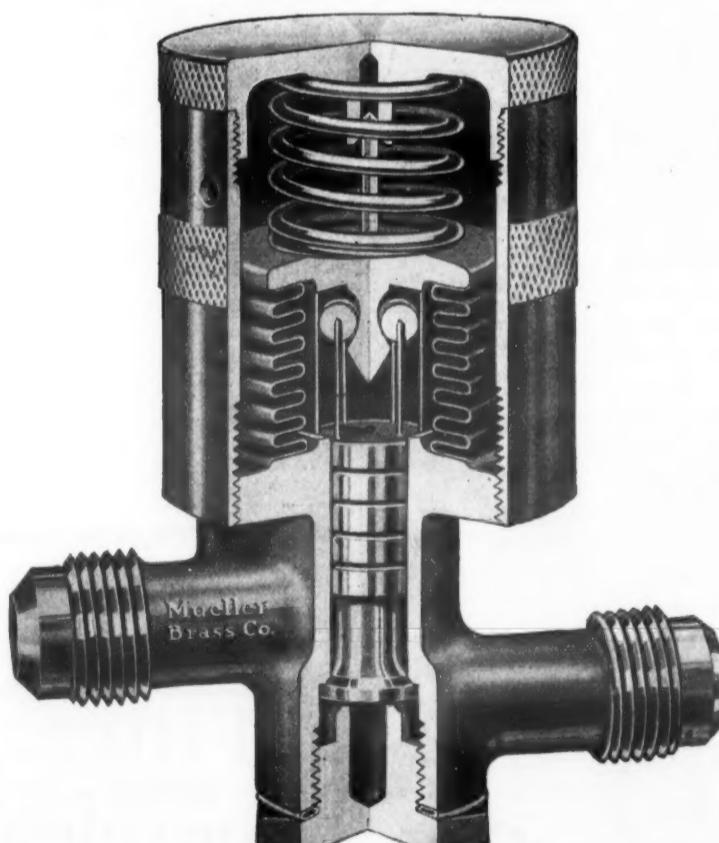


Mueller Brass Co.  
Valves and  
Fittings are  
approved by  
the Underwriters'  
Laboratories of  
Chicago

There is no single feature in the construction of mechanical refrigerators deserving of more thoughtful consideration than valves and fittings. Here at least is one place where the human element in manufacture as well as in operation can be entirely eliminated and 100 per cent fool-proofness obtained.

Mueller forgings are made under hundreds of tons of pressure at a cherry-red heat in dies that eliminate any chance of inaccuracy, and from these Mueller Refrigerator fittings are made. This method of processing insures unusual strength, absolute uniformity, 100 per cent usability and positive protection against gas leakage.

Your ultimate consumer has been educated to demand the utmost, not only in outward appearance, but in technical detail. He is not only going to demand the safety and long life assured by forged brass parts, but he is going to assure himself eventually that they are MUELLER FORGED.



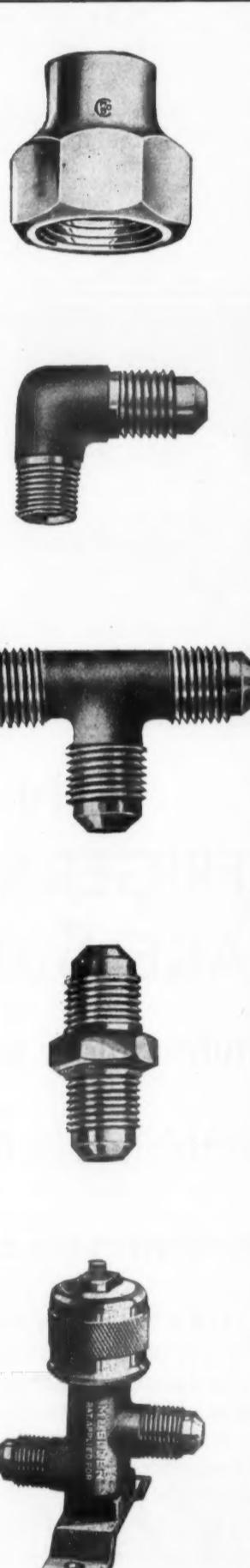
A-11095—Mueller Two-Temperature Control Snap Valve  
SPECIFY OPERATING PRESSURE WHEN ORDERING

SEND US ISAMPLES OR BLUE PRINTS FOR QUOTATIONS

## Mueller Brass Co.

PORT HURON, MICHIGAN

THREE GENERATIONS OF BRASS MAKING



We manufacture a  
complete line  
of valves and  
fittings and  
can supply your every  
requirement.

**E.T.L. Service**for Domestic and Commercial  
Electric RefrigerationTesting and experimental laboratory service for Manufacturer, Distributor, Central Station—  
Test data exclusive property of client.**ELECTRICAL TESTING LABORATORIES**

80th Street and East End Avenue, NEW YORK CITY, N.Y.

**The Price**

of the SUPER Automatic Oil Heater is so low that the average home owner can afford both oil heating and electric refrigeration.

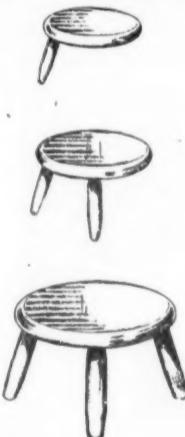
Why not sell both, and make two profits on one overhead?

**THE SUPER OIL HEATER CO.**  
PAWTUCKET, RHODE ISLAND

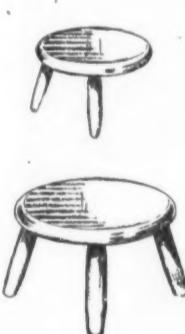


# IN FOOD STORE REFRIGERATION MAKE SURE YOU GET

1. uniform low temperature



2. controlled humidity



3. revolving air circulation



**CORRECT** humidity control and natural revolving air circulation are vital in food store refrigeration. Unless these essentials are correctly combined with uniform low temperature the food merchant suffers serious losses from spoilage and dehydration.

The new 5100 Hussmann Patented Quick Service Display Counter provides controlled humidity and natural revolving air circulation. Actual tests with this new Hussmann show dehydration of less than  $\frac{1}{2}$  of 1%. Ask for all the facts.

**HUSSMANN**

Refrigerator Division

ALLIED STORE **ASU** UTILITIES CO.

General Offices—Saint Louis

Sales Representatives in all principal cities

## Mississippi Veteran Finds Satisfied Customer is Keynote to Increased Selling



Uncle Ben sells another G. E. refrigerator

By Archie Richardson

PORT SAID, on the Suez Canal, is a long way from Ellisville, Miss., but it holds the explanation of why electric refrigerators, ranges and big automobiles are found in about equal numbers in the little town of Ellisville.

Starting out to see the world and in charge of thirty Missouri mules, Ben P. Gowen found himself in Port Said something like fifty years ago.

"I was a bit rusty on my Arabic and couldn't do much in a conversational way," he explains, "but I fell in with some of the local merchants who knew enough English to separate me from sixteen good American dollars. And what a collection of antiques I got for my money! The stone with which David killed Goliath, and others just as rare! And I came near possessing the shears with which Delilah cut Sampson's hair, only the Shylock wanted seventy-five cents for them, and when I had jewed him down to fifty cents I happened to notice the imprint, 'Made in U. S. A.'"

Mr. Gowen left Port Said with a tremendous admiration for the salesmanship of the merchants he had met, and after drifting around the world for a good many years, decided to come back to his native land and be a salesman. Accordingly, twenty-three years ago found him in Ellisville, where he has been ever since. He became manager of the local utilities under municipal ownership and remained as manager under successive changes.

When the Ellisville utilities became a part of the Mississippi Power Co., and an intensive merchandising campaign was inaugurated, Mr. Gowen had an opportunity to give his ideas of salesmanship full play, and they worked out so well that Ellisville soon became one of the most completely electrified small towns in the country. Mr. Gowen (everybody now calls him "Uncle Ben") has made such a success of his job in his home town that he is much in demand as a speaker, and frequently has to attend salesmen's meetings in other

cities to tell them how he does things in Ellisville.

Every family that has a good car is a prospect for an electric refrigerator, a range and a number of other appliances, he has found. The owner of a good car can not only afford an electric refrigerator, but he and his wife are nearly always people who give much thought to their home and will give consideration to any time- and money-saving device that is offered them. Not every owner of a big car can be sold an electric refrigerator, nor are the prospective buyers of refrigerators limited to big car owners; often a man with a four-cylinder car can be sold, when his neighbor who owns a six cannot.

"In dealing with the people of a small town," said Mr. Gowen, "the first step in selling an electric refrigerator is to show the prospective buyer just what it will do. He must be convinced that it can be depended on at all times, that it will continue to give satisfactory service for many years to come, and that its use is economical.

"Every refrigerator we have sold is now helping sell others, for the reason that the owners are thoroughly sold on them and like to tell their friends how it eliminated the daily coming of the ice man and the inconvenience incidental to having ice put in every day; how foods can now be kept perfectly fresh for even weeks, how easy it is to make frozen desserts; of the supply of little ice cubes that are always ready for use, and the many other advantages.

"The biggest handicap in the sale of electric refrigerators, the price, is also removed in large measure by owners who will tell their friends and prospects how they are paying so much a month, and in some cases meeting the monthly payments and the cost of operating the machine out of what they are saving on ice bills. There are people in the small towns who are paying more for ice than they would have to put out each month to pay for, and use an electric refrigerator, and selling them is just a matter of reasonably good salesmanship and showing them the facts in the case.

"Our electric cookery instruction classes give us a chance to show electric ranges to good advantages. The women who come are keenly interested in their homes and bettering their living conditions, and in most cases are able to buy. The attractive white box and the cleanliness and everything about the electric refrigerator arouses their interest, and when they are shown the many advantages and how economical it is, the desire for ownership gets a strong boost.

### NORTHEASTERN RADIO ENLARGES QUARTERS

Boston, Mass.—Headquarters at Northeastern Radio, Inc., Copeland distributors, are being enlarged and redecorated. Partitions are being erected to make offices for the heads of various departments. The service department is to be more accessible than heretofore and the showroom is being renovated.

Mr. Ullman, president of Northeastern Company, says that the expansion is due to the volume of present business. The work is expected to be completed this week.

"When a woman asks, say, something about the cost of using an electric refrigerator, how its cost compares with an ice refrigerator, how long it will preserve certain foods, or anything of the kind, the questions can be referred to the local owners who will detail their experiences in a way that will carry more weight with the hearers than anything a salesman could say.

"Of course, it is essential that every machine that we sell should give entire satisfaction. It is as important that the customer should not be oversold as that he should be completely sold; perhaps more so. If he is oversold, he will expect of his purchase something it cannot deliver, and he will not be a one hundred per cent booster for us, while if he gets more than he expected when he bought it, his friends will hear of it. We spare no effort to keep every machine in the best of condition, and when a complaint comes in the cause is immediately investigated and remedied, whether it be due to a mechanical defect or a misunderstanding on the part of the user.

"There is a lot said about the psychology of selling and the time to approach a customer. This is something that must be given due consideration. There are times when a suggestion may turn a sale, and other times when it may kill all chances of selling.

"Often a woman will come in and complain about the amount of her light bill, pointing out how much more it was the last month than the previous. That is an old story, and I try to suggest to her the reason why it should be more. It may be that she has ironed more, that there have been guests in the home and more lights used, or other causes. And if I can satisfy her and get her in a good humor, I mention that if she would buy an electric refrigerator or range, or better, both, she would save enough on the rate she is paying to cover her light bill every month. The suggestion sets her to thinking, and in many cases she comes back to ask for more details. Many a sale has grown out of just such a suggestion as this.

"But if, on the other hand, I cannot make the customer believe that the bill is higher merely for the reason that more current has been used, and she goes away dissatisfied, I am careful not to say anything about buying a refrigerator or a range. I may have her name on my prospect list and may sell her later, but to suggest the matter at the time is likely to kill for all time the chances of making a sale.

"Briefly, selling refrigerators in a small town is largely a matter of picking out those who are able to buy and those progressive enough to be interested, then watching for every chance to sell them on electric refrigeration. When an owner comes in and tells me how much he has saved through the use of his electric refrigerator, or mentions that the health of his family has been better since he bought it, I see to it that those on my prospect list hear of it. And I am constantly on the lookout for ideas that will keep electric refrigeration in the minds of our customers in the most favorable way possible."

### INSTRUCTIVE PAPER

"An interesting and instructive paper"—J. L. Petaccia, 1306 Elm St., Utica, N. Y.

**The Filtrine Filter**  
assures  
pure, clear  
water  
from your  
**ELECTRIC**  
Water Cooler  
WRITE FOR DETAILS  
**FILTRINE**  
MANUFACTURING COMPANY  
49 Lexington Ave. Brooklyn, N.Y.  
Manufacturers of FILTERS & COOLERS of all sizes.

## Fire Which Destroys Birmingham Home Leaves Electric Refrigerator in Working Order



This Kelvinator survived intact although nearly buried by collapse of roof.

### G. E. REFRIGERATOR SEEKS SALAMANDER TITLE

Boston, Mass.—After a fire had completely destroyed the home of W. J. McGillie, in Cambridge, Massachusetts, the General Electric refrigerator was found in the ruins. To the surprise of everyone, the unit was still operating—and it kept right on operating after it had been dug out and placed in the window of the West Roxbury store of the Electric Refrigerator Company of New England, General Electric refrigerator distributors in Boston.

### NEW NAME FOR ELECTROLUX PUBLICATION

Evansville, Ind.—According to an announcement by H. W. Foulds, vice-president in charge of distribution, the monthly dealer publication of Electrolux Refrigerator Sales, Inc., will henceforth be known as *Electrolux Refrigerator News*. Formerly known as *Electrolux Refrigerograms*, this publication will continue to be issued monthly, but will be enlarged in physical size and scope of editorial content.

### INTERESTING PUBLICATION

"It is very hard to do without this interesting trade publication."—W. J. Crocker, 765 Excelsior, Oakland, Calif.

Birmingham, Ala.—On Christmas night the home of W. M. Capps, in Wylam, near here, was destroyed by fire. The fire had gained so much headway when discovered that the family just reached safety before the roof crashed in. None of the household equipment was saved.

The next morning the Model P-8 Kelvinator was found standing, with the roof down around it and all kitchen equipment destroyed. The sides were charred and black and the hardware and porcelain were ruined. When the cabinet was opened the food and milk that had been left in it were found in perfect shape and the trays had ice frozen in them. The Kelvinator had gone through the hottest part of the fire and had come through with only damaged panels on the cabinet.

Clark & Jones, distributors of Kelvinator in this district, report that the machine is back in operation.

### SMOOT ADVANCED BY HAJOCA CORP.

Philadelphia, Pa.—W. D. Smoot has just been appointed manager of the refrigeration department of Hajoca Corporation, Electrolux distributors. Mr. Smoot has been sales manager of this company for the past several months.

Mr. Smoot was previously supervisor of the Baltimore branch of Frigidaire, and prior to that time was connected with the Consolidated Gas Company, of Baltimore. He is a graduate engineer of Johns Hopkins University.

### BELIEVE IT OR NOT

New York, N. Y.—A recent serious conflagration in an apartment house did considerable damage to the premises, but the Electrolux gas refrigerators installed there came through practically intact.

Practically the entire top floor of the apartment house was destroyed by the fire, and the kitchens on this floor were heavily damaged. The boxes were badly scorched and the exterior finish ruined by the flames, yet the units of all the

Electrolux boxes installed in these apartments are at present capable of operating perfectly, and the interior porcelain is not cracked or broken in any place.

One refrigerator in particular was the center of considerable interest, because it seemed to "out-Electrolux" the rest. This refrigerator was in a kitchen where the roof was destroyed, and where the fire raged fiercely. Several hours after the fire was out, inspection by the Consolidated Gas Company of New York showed that the milk and eggs in the refrigerator were fresh, and that there was still a trace of ice in the cube trays. One egg was broken by the inspectors, and it was found to be perfectly fresh and raw, and not hard baked as would be expected. This unit was also found to be in perfect condition.

### ILLINOIS UTILITY PLANS INCREASED RURAL SALES

Dayton, Ohio—The modern farmer is demanding all the comforts and conveniences enjoyed by the city man, among them electric refrigeration, according to John G. Learned, vice-president of the Public Service Co. of Northern Illinois, who was in Dayton January 16 to confer with Frigidaire officials.

Accompanied by other officials of his company, Mr. Learned began rounding out plans for large increases in Frigidaire sales in the territory served by his company, 16 counties in northern Illinois, covering an area of 6,300 square miles. From the standpoint of electric refrigeration sales, Mr. Learned said, the present year will be the best in the history of his company.

### KELVINATOR BRANCH MEN HOLD CONFERENCE

Detroit, Mich.—Kelvinator branch managers were in conference with Godfrey Strelinger, manager of branches, at the factory, January 20-21. Those present were: Harry Troutwine, Boston; George W. Moister, Philadelphia; W. O. Crabtree, New York; H. E. Marshall, Cleveland, and A. H. Goulet, Detroit.

### REFRIGERATION SPEEDS GROWTH OF HYACINTHS

Washington, D. C.—By refrigerating hyacinth bulbs, Dr. David Griffiths, in charge of bulb work for the United States Department of Agriculture, brought several flowers into bloom as early as the first of December, 1929. The hyacinth blossoms about the first of January, when forced, or in the spring, when grown out of doors, so the refrigerated bulb matured from thirty days to six weeks sooner than the forced or hothouse bulb.

Dr. Griffiths chose an early variety of hyacinth, L'Innocence, for his experiment. He produced artificial winter conditions by placing the bulbs in a refrigerator, causing them to undergo important changes. The cold atmosphere caused the root systems to develop fully and rapidly. This is necessary before warmer temperatures bring the stalk to the top, because an inadequate root system will not provide the required water to the flower. The plant, during its dormant period, is formed in miniature within the bulb. Important chemical changes occur in the plant tissues themselves. Then, after the warmth is applied, the plant shoots its green stalk and blossoms.

By keeping the bulbs at a low temperature, Dr. Griffiths found that these changes can be hurried and the flower brought to early maturity.

### SPOKANE FRIGIDAIRE SALES JUMP 33% IN 1929

Spokane, Wash.—Frigidaire sales in Spokane and the Inland Empire through the P. F. Pickett Company, local distributor, were 33 per cent greater in 1929 than in 1928, following receipt of the national sales report.

Recently the company held "open house," celebrating the opening of new quarters in the Dwight building. The company now has four times the space of the former quarters, and in addition has acquired warehouse and assembling plant space on Railroad Ave.

When we add some of  
OUR PROFITS to all of  
YOUR PROFITS » » »  
You're making REAL  
MONEY!

### \* Every Quiet May Dealer

who participated in this  
profit-sharing plan during  
1929 has an equity of more  
than \$350 for each \$100  
paid in.

SOME people told us that we had gone far enough in behalf of our local dealers. They said, "Look at the weight of sales help you bring to bear in each dealer's territory!—An intensive direct-mail campaign concentrated upon the dealer's hand-picked prospects . . . regular monthly mailings of a smart magazine . . . consistent advertising throughout the year in the leading architectural and engineering publications . . . finance plans that keep a dealer's money free and working—isn't that enough?"

»»» But we said "No! There's one thing more that we can do—give our dealers a chance to share in our profits!" So, on top of everything else, we added the

### Quiet MAY\* DEALERS' PROFIT-SHARING PLAN

To our knowledge this is the *only* plan of its kind in the oil burner industry. Write and ask us how it works.

## 4 TYPES OF INSTALLATIONS UTILIZING . . . AMERICAN . . . REFRIGERATING SECTIONS

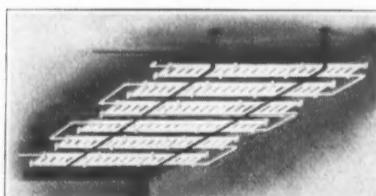
The four illustrations reproduced here are typical of many where American Refrigerating Sections are in use.

Space is saved by American Sections. Less power is required. And long life and completely satisfactory service are a certainty where these sections are used.

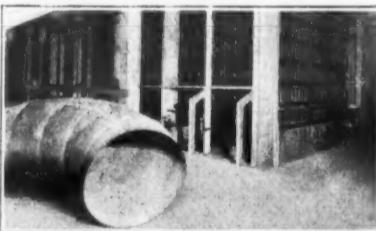
Made from close-grained cast metal, American Sections resist rust and corrosion.

Due to the header principle hot gas travel is reduced to a minimum. And because of their increased efficiency and low cost of installation American Refrigerating Sections may be installed at no greater expense than for other forms of surface.

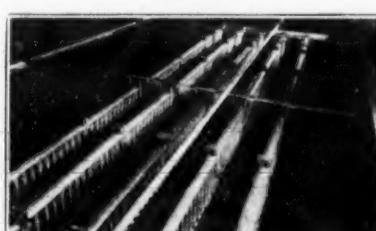
Get further facts from us. You will find them of unusual interest.



Ceiling construction where headroom is limited



Air conditioning installation in Procter and Gamble Plant, Cincinnati, Ohio



Large direct expansion  
system, Cudahy Packing  
Co., St. Paul Plant

AMERICAN RADIATOR COMPANY

INDUSTRIAL DIVISION

816 SOUTH MICHIGAN AVENUE, CHICAGO

1314 Quince Bldg., LOS ANGELES  
1301 Fifth Avenue, SEATTLE

» MAY OIL BURNER CORPORATION • BALTIMORE • MARYLAND «

## REX COLE SALESMEN IN SKYSCRAPER CONTEST

New York, N. Y.—Rex Cole, Inc., General Electric refrigerator distributor, started a 1930 Skyscraper contest, Jan. 16. The Skyscraper is to be built of General Electric refrigerators.

Each sales department, dealer and sales division of Rex Cole is erecting a building of its own, each building to be 100 stories in height. Each 1 per cent of quota realized by the Rex Cole organization constitutes the completion of a floor in the building under construction by such sales unit.

The names of the buildings under construction, the superintendent of each construction gang, and the names of the construction gangs follow: Rex Cole Tower, Robert Stevenson, Rex Cole Organization; Apartment House Hall, John J. Massimi, Apartment House Specialists; Commercial Coliseum, L. Howard Jenks, Jr., Commercial Specialists; Retail Fortress, Paul H. Hichborn, Retail Organization and Wholesale Stadium; Maurice E. Pipkin, Dealer Organization. The remainder of the building organization is composed of the following: Dorfing, Jr., L. K. Almy, William J. Clark, Harold C. Caspers and John F. Reese, engineers and draughtsmen;

Daniel F. Secord, William J. Fisher, Oscar A. Card and J. G. Horton, bureau of material and transportation; John Roy, renting agent, and Lawrence R. Hills, union delegate-at-large.

At the beginning of the contest, Rex Cole gave Robert Stevenson, as building superintendent, a contract to erect a 100-story structure of General Electric refrigerators sales. Mr. Stevenson concluded an agreement with Messrs. Massimi, Jenks, Hichborn and Pipkin for the construction of their departmental buildings. Messrs. Hichborn and Pipkin concluded contracts with sales directors and dealers, respectively, for the erection of the buildings to be built by the sales units in their respective organizations.

Each salesman, as a member of the construction gang to which he belongs, was given a contract to perform certain work towards the erection of the structure which his sales unit contracted to build.

As soon as a building reaches a height of 100 stories, indicating that 100 per cent of the quota has been sold, the divisional colors of the sales unit constructing the building will be flown from the roof tree.

A special construction bonus will be given to the departments that go above the established quota. Prizes for the winners of the contest range from \$100 down to \$5.

### "They Keep a-Running"



20 Horse Power  
Century Type SC  
Squirrel Cage In-  
duction 3 and 2  
Phase Motor.

### Continuity of Service The Real Test of Any Motor



Century 250 Horse  
Power 60 Cycle 440  
Volt 1800 R. P. M.  
3-Phase Squirrel Cage  
Induction Motor.

CENTURY ELECTRIC COMPANY

1806 PINE ST. ST. LOUIS, MO.

40 U. S. and Canadian Stock Points and more than 75 outside thereof.

*Century*  
MOTORS

1/4 to 250 h. p.

1/4 to 250 h. p.

### Your Present Sales Force Can Handle this Easy Extra Business

Here's easy extra profits. Good business. Volume that naturally comes to high class refrigeration distributors.

The Gem Kitchen Mechanic electrically shortens the hours and lightens the labor of food preparation. Mixes—beats—whips—slices—grinds—and freezes ice-cream. Cost of operation, only a penny an hour. A necessity in better homes. Ninety per cent of the national magazines carry advertising of food manufacturers suggesting recipes that require mixing. **Cash in** on this advertising, with the most important kitchen device women have ever had. The Gem Kitchen Mechanic is also fine for commercial installations.

A sturdy machine that requires little or no service and can easily be sold by your present organization. Quick sales, and a discount that allows you a wide margin. Write for complete descriptive literature—**Now!**

### Gem Kitchen Mechanic

TRADE MARK REGISTERED

Mixes - Whips - Beats - Slices - Grinds - Freezes

GEM APPLIANCES, INC., 280 Madison Ave., New York City

## Luxurious Showroom Provides Attractive Setting for G. E. Refrigerators in Cincinnati



Cincinnati, Ohio—Burck-Bauer, Inc., Cincinnati dealers of General Electric refrigerators, recently opened attractive new showrooms.

Soon after the appointment of the Milnor Refrigeration Company as Cincinnati General Electric distributors, Burck-Bauer, Inc., were selected as dealers in this city and have been doing a

remarkably fine job. The rapidly expanding business forced them to seek more spacious quarters in "Refrigeration Row."

The interior decorations of the Burck-Bauer store are particularly attractive. The walls are of stone up to a height of nine feet, and the remaining space to the carved-beam ceiling is covered by

### SUBJECT WOOD CABINETS TO HIGH HUMIDITY TESTS

WOOD is still an important factor in the electric refrigeration industry. Many manufacturers use considerable wood in the construction of their cabinets, and with the advent of frozen foods and the consequent necessity for display cases in which to keep them while awaiting purchase by the consumer, it is probable that even more wood will be used than has been the case in the last few years. For these reasons the experiments conducted last year by the Bright Laboratories for the National Lumber Manufacturers' Association are of great interest, despite the fact that the wood cabinets tested were ice refrigerators. The data obtained as a result of the tests showed the performance of wood under conditions of high humidity without and low temperatures within, conditions which electric refrigerators are called upon to encounter especially in the southeastern part of the United States.

Three boxes tested were alike in all respects, except that one was built with a paneled finish for the sides and the doors in front; one had the smooth or "flush" finish, and the third had the smooth or "flush" finish but with a special type of paint coating consisting of two coats of aluminum paint and two of white enamel in place of the commercial varnish finish with which the refrigerators "A" and "B" were provided. The back and bottom of refrigerators "B" and "C" were covered with a tight sheet of dense fiber board to shut out air from the beaded ceiling, whereas refrigerator "A" had no such protection.

The three refrigerators were placed in a testing room, which was equipped to maintain constant temperature and humidity conditions, and were subjected to a test run of one week to determine what temperatures were maintained within them when normally filled with ice and what the ice melting rate was under standard test conditions of 80° temperature outside. The humidity of the air in the room was then raised to about 90% and the temperature to 90°, simulating the most extreme conditions ordinarily met with under summer conditions, and kept there for a period of about five weeks. This period is estimated to at least equal in effect that of the varying and normally less drastic conditions met with throughout the whole period of a southeastern states' summer. After the five weeks' exposure the refrigerators were again subjected to a week's test run to see what change there had been in temperatures maintained and ice-melting rates during the five weeks' period. Careful attention was given to the amount of condensation on the boxes, to their increase in weight due to absorption of moisture, and to the condition of the exterior finish during and after the test. At the factory where the boxes were made samples were taken of the wood used for each part of the refrigerators and the amount of moisture held by the wood was determined. Subsequently to the tests the refrigerators were wrecked and the amount of increase of moisture in each part of the refrigerator was determined by similar samples.

Contrary to expectations the tests showed little difference between the paneled and flush type refrigerators finished with varnish. The exteriors were badly stained and discolored in both instances, and there was considerable mold in various places on each, in-

silk tapestry. A balcony provides space for offices and a completely fitted Refrigeration Institute.

Heading the organization are H. E. Burck, president; M. J. Bauer, vice-president, and F. H. Burck, secretary. F. V. Whitton is in charge of refrigeration activities. The photograph shows the new showroom on the opening day.

indicating the probability of decay over a long period of use. The moisture content of the wood in the paneled box increased 8.9%; that of the flush surfaced box 9.9%. Samples taken from different parts of these refrigerators showed a pronounced absorption of moisture in the beaded ceiling next to the drain, the outer ice rail, milk door panel and outer bottom rail, ranging from 15.9% to 57.4%. This is by comparison from 2 to 7 times as much moisture as wood furniture ordinarily holds during the summer season. As a result of this increase in moisture content, glued joints, especially in the doors and front frame in the paneled refrigerator, were in bad condition, and there was noticeable bulging, warping, and other damage of various parts of both boxes.

It is probably impossible to reproduce in a few weeks' test the effect of several years' service and humidity exposure on the efficiency of these boxes. The changes in refrigerators "A" and "B" during the test, however, were distinct and significant. The paneled box lost about 2% of its "cooling effect" or ability to protect food from high temperatures. The flush type box lost 43% of its cooling effect. The ice melting rate in the paneled box increased 3% during the test; that of the flush type box 13.5%. While the paneled box showed up better from this viewpoint than the flush type, the general failure of its glued joints and the condition of the wood indicate an ultimate loss of efficiency as serious, or perhaps even more serious than that shown by the flush type box.

The behavior of the third refrigerator tested, a flush type box finished on the outside with two coats of aluminum paint and two of white enamel, was strikingly different, due, it is believed, (Concluded on Page 21, Column 1)

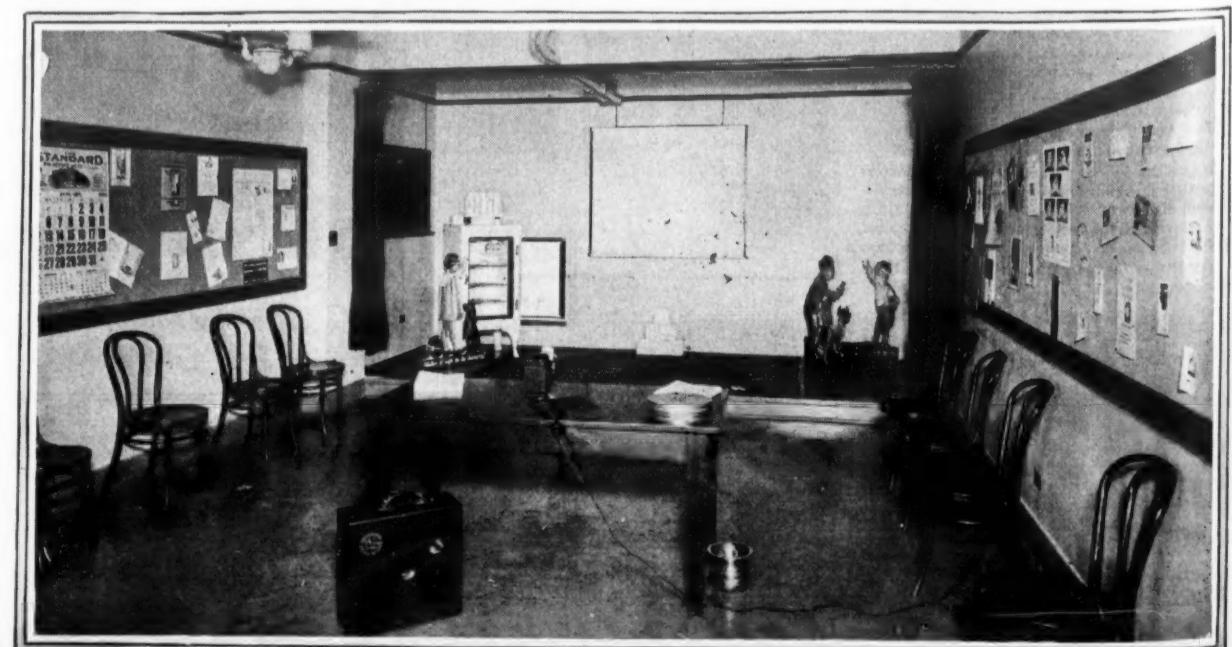
### Moving Picture Projector Ready for Action in G. E. Refrigeration Institute in Louisville Store

Louisville, Ky.—Only six feet from one of the busiest corners in the city, the Electric Refrigeration Company has its new store. The display room has a twenty-two foot front on 4th Avenue, and in addition has display windows in the arcade of the sixteen-story building the store occupies.

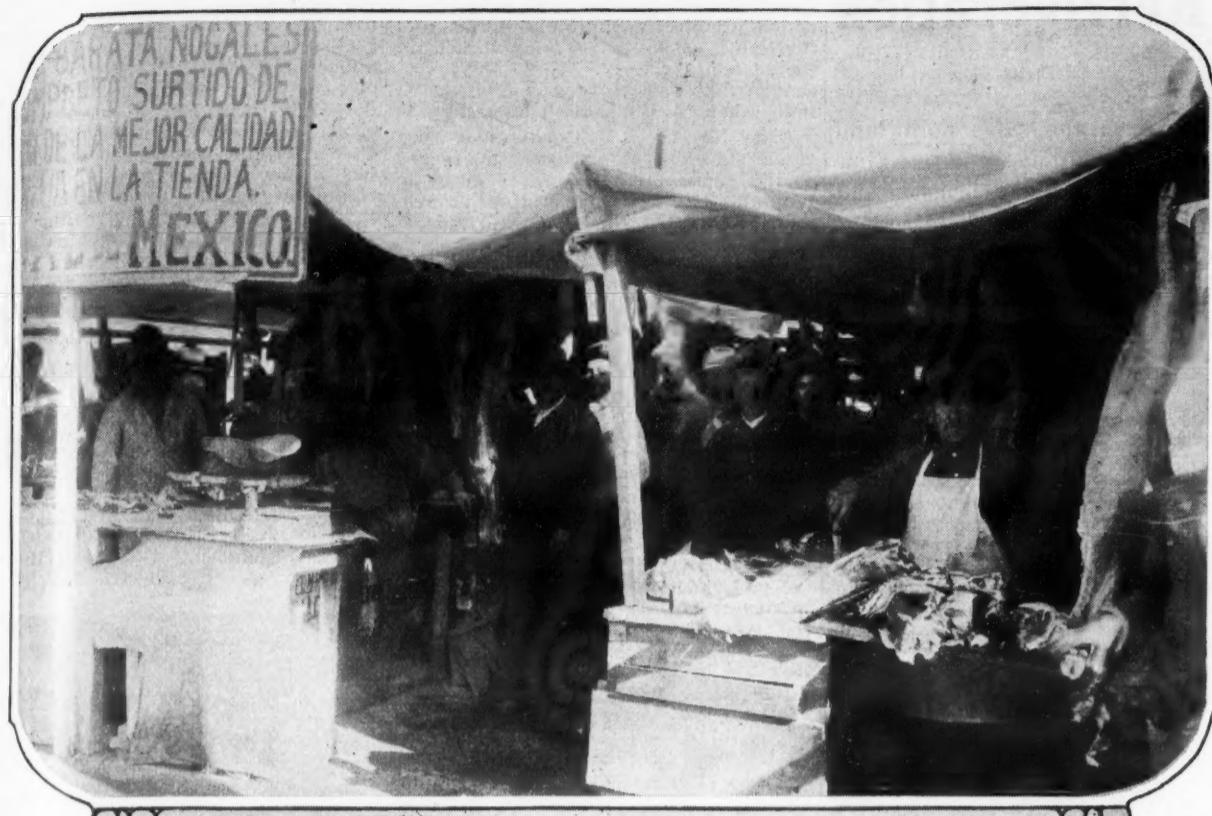
The floor space of the main floor is 1,800 sq. ft., the offices on the mezzanine occupy 1,200 sq. ft. and the commercial department and Institute are in the basement. Warehousing facilities are provided by a one-story building which the Electric Refrigeration Company of Louisville have purchased, about four

blocks from the main store. The warehouse is close enough so that machines can be brought to the store quickly.

The Electric Refrigeration Company of Louisville is distributor of the General Electric refrigerator, and has branch stores in Lexington, Kentucky, and Evansville, Ind.



## Mexican Cities Near U. S. Border Realize Need for Protecting Food



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For several years the border cities of Mexico have been outlets for the products of electric refrigeration manufacturers. A number of individually owned markets and restaurants have installed electric refrigeration, while the city-owned market buildings remained in their original state of uncleanness and open work sales booths.

In Mexico the cities furnish market buildings for the merchants, where stalls and booths are rented for a small sum. Most of the trading is done in the city market. Everything is sold here, from rugs to buggy whips. The meat and vegetable stores are set down in the middle of this dusty line of merchandise with, sometimes, a sort of fly-screen enclosure. The screen lends little help in keeping the flies out and only acts as an impediment to the larger particles of dust and dirt that are stirred up every time a customer wants to see the rug on the bottom of the pile at the vendor's next door, or are blown in from the dusty traffic without. In the old days the Mexican did not seem to mind. A few years ago meat was bought from the dusty counter and received through the little trap-door in the screened enclosure, with no thought of the consequences.

The coming of electric refrigeration in towns in the United States along the Mexican border brought changes in the operation of large stores across the line. In Nogales, Mexico, some time ago an enterprising Mexican merchant equipped his little store and meat market with up to date food preserving equipment. He had seen modern installation across the border in Nogales, Arizona. He soon noticed the results of such changes in his own place of business. His sales in-

creased. The Mexicans noticed that the food bought from electrically cooled showcases was better than they have been buying in the municipal market.

This sort of change has been going on for the last three years all along the border. In Juarez, Mexico, alone, more than forty restaurants and markets have been equipped with electric refrigeration.

The old institutions and old, unsanitary methods are falling rapidly. The municipal market has started making changes for the better in many Mexican cities along the border. The old fly-screened meat and vegetable markets are being torn out and modern electrical equipment for food preservation is being installed. Nogales, Mexico, is the first city to tear out all of the old equipment in the municipal market and install electric refrigerating equipment. Nogales, Mexico, is a large city just across the line from Nogales, Arizona, and its municipal market houses several meat shops. Recently the whole market was changed and all electric refrigeration equipment installed by the Nogales representatives of Cooper-Gillett Co. of El Paso. Cooper-Gillett Co. are southwestern representatives of Frigidaire.

The Nogales installation is one of the largest made by the Frigidaire representatives in northern Mexico. Broad Electric & Radio Co., the Nogales representatives, equipped the municipal market with sixteen large display cases, sixteen coils and four compressors at a cost of approximately \$8,250.

### KELVINATOR OFFICIALS AID REFORESTATION FUND

Detroit, Mich.—Twenty-five executives of the Kelvinator Corp. contributed \$400 to the Michigan Reforestation fund, which will pay for the planting of pine trees on 160 acres of idle land. The matter was handled by E. A. Selbert, Kelvinator service manager.

### LOUISIANA KELVINATOR MEN MEET

New Orleans, La.—More than 50 Kelvinator dealers and distributors from Louisiana met at the Monteleone Hotel, Friday, Jan. 24, to view and discuss the new models. E. T. Jones, manager of the refrigeration department of the Electrical Supply Co., was chairman of the meeting.

The Kelvinator factory was represented by T. D. Hallock, southeastern district manager; J. S. Sayre, sales manager, and E. A. Seibert, service manager.

Leo Hersch, president and general manager of the Electrical Supply Co., and G. W. Cleveland, manager of the refrigeration department of the Electrical Service Co., here, were the principal speakers at the evening dinner.

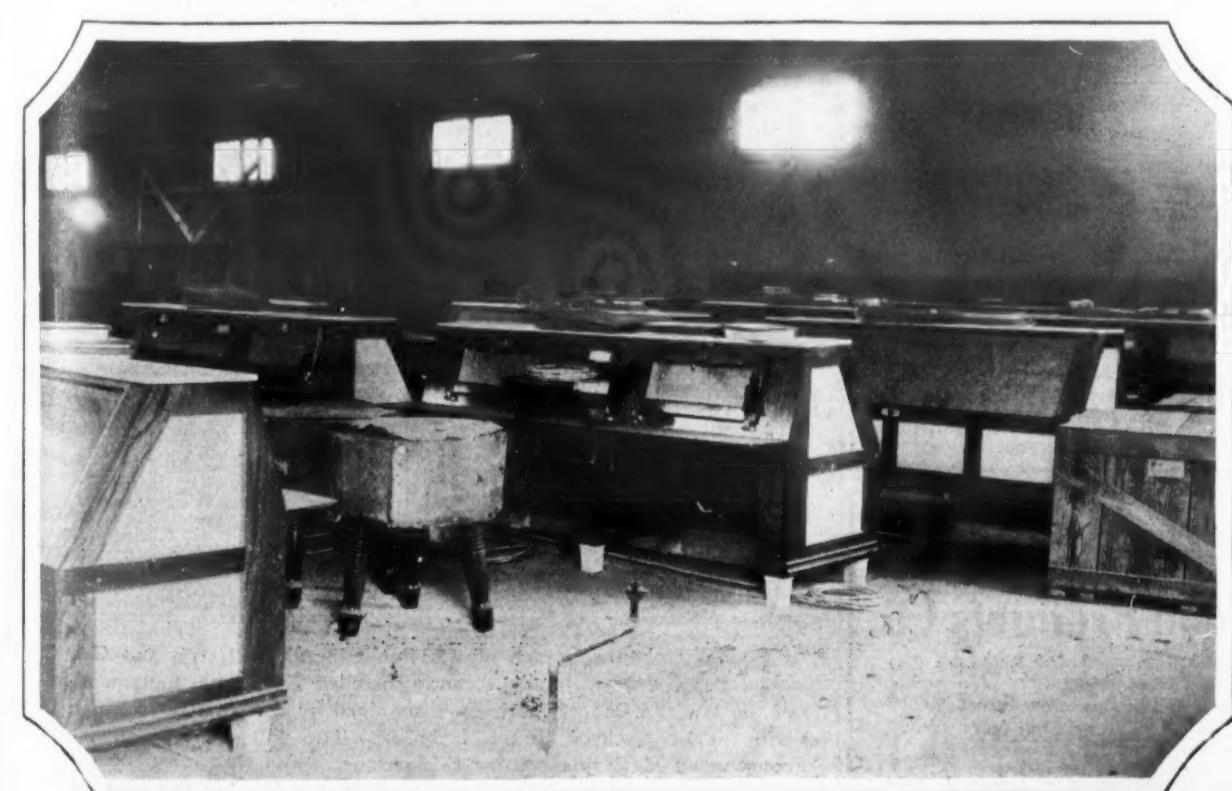
### ICYBALL DISTRIBUTOR FOR DES MOINES

Des Moines, Iowa—The Nebraska Buick Co. has been appointed local distributor for the Icyball absorption type refrigerator, which is manufactured by the Crosley Radio Corp., 3401 Colerain Ave., Cincinnati, Ohio. The local firm maintains an office and showrooms at 12th St. and Grand Ave.

### UTILITY TO SELL GENERAL ELECTRIC UNITS

Danbury, Conn.—The Danbury & Bethel Gas and Electric Co. has taken over the local agency for General Electric refrigerators. Its territory includes Danbury, Bethel, Newtown, and Brookfield.

Upon taking over the agency, members of the local concern were guests of Rex Cole, Inc., New York, and the General Electric Co., Cleveland, Ohio, at a banquet in the Hotel Green.



Municipal market in Nogales, Mexico, which has been completely equipped with sixteen display cases and four Frigidaire compressors.

### CORRECTION

COPELAND SALES COMPANY  
Mt. Clemens, Mich.  
Electric Refrigeration News,

On Page 27 of the January 29 issue of your publication, in the second paragraph of the second column, there appears a statement which, by implication at least, conveys the impression that Copeland had a factory branch last year in Omaha. This is directly contrary to the facts of the case, and inasmuch as the distributor whom we signed up there has also attempted to convey that impression in Omaha, it seems that a tacit acquiescence of this statement on our part might lead to difficulties.

I am going to ask you therefore if you won't see that it is retracted, either by the author or by yourself. The name of our distributor was the Copeland Refrigeration Company of Omaha, and the name of the proprietor was Dr. R. C. Oliney. The contract was closed on the 29th of April, 1929, and they have been out of business for some time.

Yours very truly,  
C. W. HADDEN.

### BOTTLE WATER COOLERS REPLACE ICE

Denver, Colo.—J. E. Flynn, who came here recently from the Cleveland offices of the General Electric Co., announces that a contract for the rental of General Electric bottle water coolers has been completed with the Deep Water Co. here. The new bottle coolers will replace the ice coolers now in use.

### FILM SHOWS VARIOUS USES OF MONEL METAL

Huntington, W. Va.—A two-reel motion picture film, showing the preparation of Monel Metal in its various commercial forms in the local plant, has been released by the Rothacker Film Corp., Chicago.

The film traces the uses of Monel Metal in more than a score of different industries. It shows the tapping of an eleven-ton furnace, with the molten metal being poured at a temperature of 3,000 degrees Fahrenheit.

**precision built** **Motor, Transmission, Eccentric and Crank SHAFTS**

MADE TO YOUR SPECIFICATIONS. SEND US YOUR BLUE PRINT — WE WILL SEND YOU OUR PRICES.

**MODERN MACHINE WORKS, INC.**  
196 MILWAUKEE STREET, MILWAUKEE, WISCONSIN.

## FREE FACTS YOU SHOULD KNOW About ELECTRIC REFRIGERATION

Mail Coupon for Big New Book on Electric Refrigeration. Chock Full of Valuable Facts. Tells How to Win Promotion and Increased Pay. Sent FREE Without Obligation.

**NOW . . . INCREASE YOUR EARNING POWER**

Here's great news! A new method of training now brings you every principle and practice of electric refrigeration at home in simple terms. Valuable to serving men, salesmen, dealers, executives, factory and office workers. Praised and endorsed by Servel, Kelvinator, General Electric, Zerozone, Copeland, etc.

Easy to Learn—Simple as A. B. C.

Manufacturers and Dealers, enroll your men for this training NOW. Trained graduates available. Inquiries invited!

**UTILITIES ENGINEERING INSTITUTE, Dept. 920**  
4403 Sheridan Road Chicago, Ill.

**UTILITIES ENGINEERING INSTITUTE**  
Dept. 920, 4403 Sheridan Road, Chicago, Ill.

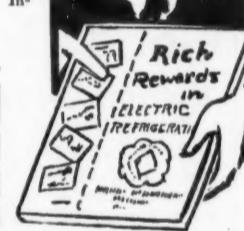
Send me at once without cost or obligation your Big New Book of Facts and full details of your new easy training in electric refrigeration.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

Position \_\_\_\_\_



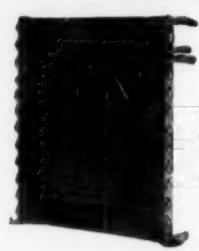
## PROTECT your SERVICE Repairmen from Sulphur Dioxide (SO<sub>2</sub>) with PULMOSAN CHEMICAL Cartridge (SO<sub>2</sub>) Respirators



Small —Light  
—Convenient —SAFE!  
Clip this Coupon for  
Full Information

PULMOSAN SAFETY EQUIPMENT CORP.  
176-A JOHNSON ST., BROOKLYN, N. Y.  
Send us Complete information on your SO<sub>2</sub> Respirator  
(E.R.N.)

## FLINTLOCK CONDENSERS Full Capacity

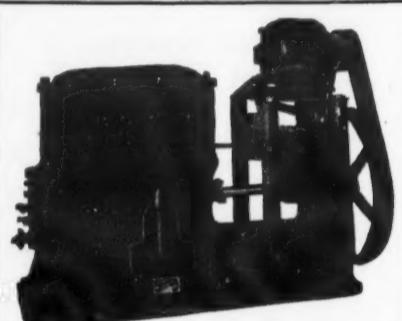


With  
Every  
Unit

FIN AND TUBE SAME  
SOLID PIECE OF  
MATERIAL

## FLINTLOCK CORPORATION

4461 W. Jefferson Ave.  
DETROIT, MICH.



### Electric Refrigeration Distributors and Dealers

You need the PEERLESS line  
of compressors.

PEERLESS units give you a  
COMPLETE line, ranging from  
one to ten tons.

PEERLESS Perfected Multiple  
Apartment System is recognized  
leader in its field. Full details  
given on request. Our record  
warrants your most exacting  
investigation.

**PEERLESS ICE MACHINE CO.**  
515 W. 38th St.  
CHICAGO, ILLINOIS

## Thorough Training Required For Selling Refrigeration

J. E. Bullard

ELECTRIC refrigeration is a specialty from the sales point and requires specially trained salesmen who devote their entire time to it just as does life insurance, automobiles, silk hosiery, brushes and any other specialty. Those companies making the greatest success of selling specialties are those which give the greatest degree of attention to training their salesmen before they send them out to make sales and inspiring them after they are on the job.

Material gathered on this phase of selling during the past thirty years, and covering many different kinds of articles, shows there are no exceptions. The same investigating done in the electric refrigeration field shows that in the long run that dealer who pays the most attention to selecting his salesmen with care, gives them a thorough course of sales training on electric refrigeration, and requires them to commit to memory an effective sales talk is the dealer who makes the most sales at the least cost.

The method of paying salesmen does not count so much as the method of teaching them to sell and maintaining their enthusiasm. On the whole, probably the straight commission basis, either with or without a drawing account, is the best system of paying. The man who will not work except on a salary basis is not likely to work hard enough or be a good enough salesman to earn his salary, regardless of how small that salary may be.

The most effective sales training is that which starts by showing the salesman how electric refrigeration is accom-

plished. This may be done by means of the refrigerators themselves, and with charts that show the different steps required in securing low temperatures. While this is being done, it is well to impress upon the man the reasons why the particular system being used is considered the best. Unless the salesman is convinced that he is selling the very best machine manufactured, and is able to prove to the prospects to whom he talks that it is, he is at a decided disadvantage from the very start. One reason why some dealers do not sell more machines than they do is because they, themselves, do not know enough about the machine they are selling to be certain it is the best on the market. A really good salesman might be able to sell them some other make for their homes.

Just what making this part of the demonstration and training convincing is illustrated by an example: A central station had just started to sell a new electrical appliance. Sales were very far from satisfactory, although the terms made were liberal. It was apparent that those who were doing the selling were not sufficiently well informed. The sales manager arranged for the president of the manufacturing company, which at that time was a comparatively small company, to give a demonstration in the evening to the sales force.

This demonstration was made and the salesmen convinced that this particular appliance was not only one that was sorely needed in every household, but that this make was by far the best one on the market. From that time on there was little trouble experienced in making sales, until it was decided to change to a different brand, when it became necessary to give a demonstration on this brand to get results. Just because a salesman has made a record selling one make of electric refrigerator is no indication that he will be able to do equally well with another. As a matter of fact, the better his record the greater the possibility that he will not do well with another make until he has been convinced that this make has points of superiority over the make he has been selling in the past. Some dealers have learned this truth to their sorrow. Others who are skeptical can easily ascertain the soundness of this rule by doing a little experimenting.

Every new salesman, regardless of his past sales experience or sales record, needs the very best sales training in selling the particular kind of refrigerator he is to sell and in the territory in which he is going to sell it. One salesman called on a sales manager to get a job.

"I don't need your sales training," he asserted. "I've had a lot of experience and can sell anything."

Rather than wasting time trying to convince him, the sales manager let him start out. This salesman worked a week and earned \$14. At the end of that time he was willing to take the training course.

He was given the regular course of training and then taken out by another salesman and shown right in the field how it is done. From then on he was able to average about ten dollars a day, and as this was several years before the war, that was very good money for such a salesman to make.

Another salesman who had never had any special training but who had spent many years selling the same specialty came under the supervision of an efficient sales manager. Before being

trained he never earned as much as \$200 a month. After being given intensive sales training he never went below \$200 a month in his earnings, and his best month under the direction of this sales manager was \$500. Yet this man continued to sell exactly the same thing under practically the same terms and the same commissions and worked in the same territory. The only real change that took place was in the attitude taken toward sales training.

After the new salesman has been given sufficient information in regard to the particular refrigerator he is to sell, and electric refrigeration in general, so that he will be able to answer any question that is at all likely to be asked him, the next step is to fill him up with real selling arguments. Of course, the argument that electric refrigeration is cheaper than ice refrigeration is not the strongest argument. What makes people buy electric refrigeration is that they can go away for two or three days and come back to find the refrigerator still cold and what they have left in it in perfect condition, that there is a uniformity of temperature that it is almost out of the question to secure with ice in the average household, that the air in the refrigerator is so dry that food keeps better than in the moist air always to be found in ice refrigerators, that ice can be made from the regular drinking water and there is no danger of contamination from ice that has been cut in a pond where the water is not pure, and such other advantages and conveniences as these. After the idea of the superiority of electric refrigeration has been thoroughly sold, the prospect is very much pleased to learn that electric refrigeration is cheaper than ice refrigeration, but this low cost is not by any means the deciding factor in making sales.

As a matter of fact, if too much attention is given to costs, it is only natural for the prospect to begin figuring costs. He figures he will have to spend at least \$200 for the refrigerator itself. It is likely that he will have to spend \$200 more than an ice refrigerator would cost him. It now costs him forty dollars a year for ice. He finds that he is going to save ten dollars a year on refrigeration. It will then take 20 years to save enough to pay for the plant, not figuring interest. By that time, if not before, he may have to buy another. He is not gaining anything. The more the cost item is featured the more the attention is directed to the fact that there is really no saving, and if the ice man gets wind that electrical refrigeration is being considered, he will help do the figuring. Therefore, it is necessary to demonstrate that electric refrigeration does what it is not possible to do with ice refrigeration.

This is the sort of training that the most successful electric refrigerator dealers are giving their salesmen. The most important points they incorporate into sales talks that the salesmen are required to learn and to use when making calls.

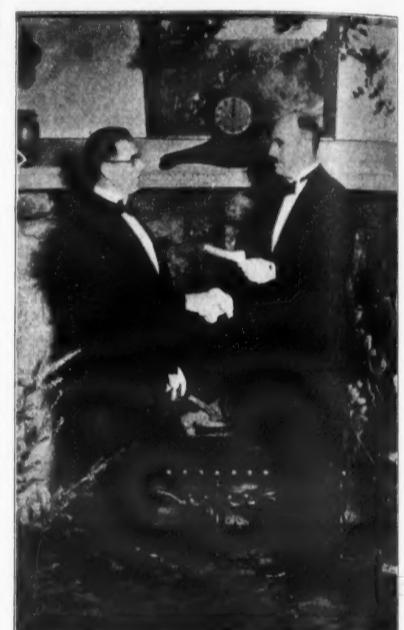
After all this is done, however, the sales results may be far from satisfactory. Methods of stimulating the salesmen and of making them work harder must be found. Various sorts of contests may be used. Bonuses may be paid for out of the ordinary records. Assistance may be given in closing sales. The salesmen may be protected in all their prospects, the salesman

registering a prospect in the office always getting the commission on the sale when it is made, even though the prospect comes into the store or office and makes the purchase.

The success attained in keeping up the enthusiasm of the salesmen, and through this enthusiasm maintaining a good sales average and earnings, determines to a very great degree the rate of turnover in salesmen. A dealer who does not train his salesmen when he sets them to work, and devotes no time thereafter to keeping them enthused has a low sales record and constant change in his sales force. It is not likely that he is able to make any money himself. The dealer who trains his new salesmen thoroughly and then gives a lot of time and attention to keeping them enthused and working hard, soon has men who stay with him year after year. He is able to get good men and his sales costs go down and his net profits up.

## CLAIMS FIRST 1930 SALE

**Wichita, Kans.**—The first sale of an electric refrigerator in 1930 is claimed by C. L. Johnson, of Johnson Brothers Company, General Electric Refrigerator



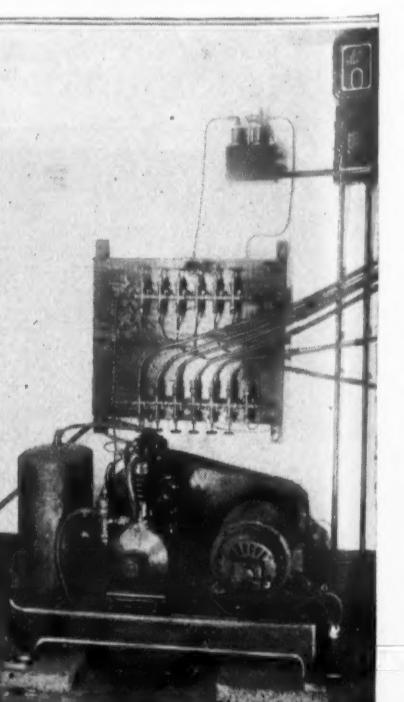
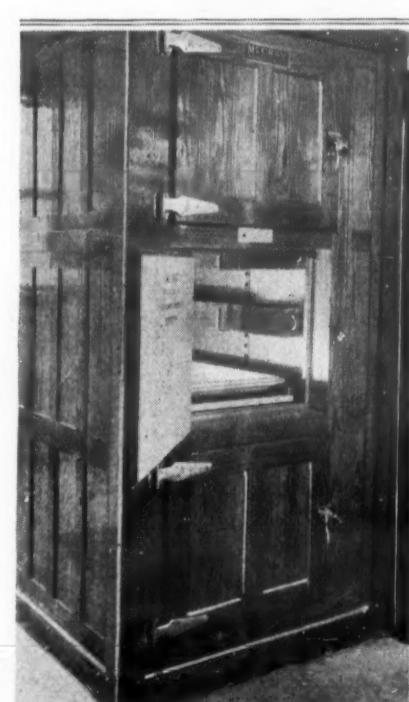
distributors in Wichita, Kansas. C. A. McCorkle, Wichita attorney, was the buyer.

The sale was made in the midst of a New Year's Eve party at the Wichita Country Club, exactly on the stroke of twelve. While the bells were ringing in the New Year, Mr. McCorkle presented Mr. Johnson with a check for the refrigerator.

## KELVINATOR OFFICIAL TO VISIT FOREIGN OUTLETS

**Detroit, Mich.**—H. A. Lewis, treasurer of the Kelvinator Corporation, and in charge of all foreign operations, sails for Europe on Jan. 31 on the S. S. Olympic. He will visit England, Germany, France, Italy, Belgium and Holland, contacting with Kelvinator distributors in those countries, and will return about April 1.

## Kelvinator and McCray Make Mortuary Installation



## FITTINGS - TUBING

Largest Stock in the East

DOMESTIC UTILITIES  
Division of the Refrigeration Corp. of Maryland  
ARLINGTON, BALTIMORE, MD.

## The Imitation Food Products Co.

(Branch of The Artistic Production Co.)

107 Lawrence Street

Brooklyn, N. Y.

Ask for our catalog of January 1, 1930.  
Direct sales only. "Indispensable with  
refrigerator display."

**T**HE Hoboken branch of the Public Service Electric and Gas Company of New Jersey recently installed Kelvinator equipment in one of the Hudson County morgues, maintained by the Charles Hoffman Company at 105 Jackson Street, Hoboken. The unit operates an especially constructed McCray mortuary refrigerator.

The equipment which is designed to provide for the care of three bodies consists of a model W. B. condensing unit, connected to six No. 72X fin coils.

**IF you are in any way interested in Electric or Gas Refrigeration**

...read the above over twice because it will mean much to you... this is our National message to the American Housewife in cooperation with your refrigerator sales campaigns. Write for samples and advertising ideas that sell your refrigerators to new customers and keep old customers interested.

Send \$1.00 for the two big 50c rolls (West of Missouri and South Coast States, 60c per roll, both for \$1.20 postpaid).

STANDS FOR "THE WORLD'S MODEL PAPER MILL"  
**KALAMAZOO VEGETABLE PARCHMENT CO.**  
KALAMAZOO MICHIGAN U.S.A.  
MANUFACTURING WORLD-WIDE FAMOUS FOOD PROTECTION PAPERS

Try your Grocer, Stationer, Hardware, Department Store and Neighborhood Merchant first; if they cannot serve you, KVP will pay the parcel post.

FREE When ordering, mention this ad for a  
Miracle Paper Dish Rag and interesting  
samples for you and your friends.



STANDS FOR "THE WORLD'S MODEL PAPER MILL"  
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## Cold Table in Berlin Restaurant Makes Hit With Patrons



A N American tearoom in a non-tea-drinking country can teach us something about building up the restaurant business. Robert's grill and soda fountain is the first all-American enterprise of its kind in Berlin, and not featuring anything strong in the drink line, it has to prove extra-strong in the culinary department. So popular has the place become within the last year that German families, nourished to enormous proportions on corn beef and cabbage, now sit uncomfortably on spindly Windsor chairs, sent over from Grand Rapids, and toy with infinitesimal chicken patties! But the real problem of catering to these extended appetites and giving Berliners that well-fed feeling has been solved by the hors d'oeuvres "filling station!"

This "filling station" stands in the center of the restaurant and consists of a permanent installation of a table-like all-metal refrigerator about four feet square. Electric cooling coils are placed underneath the zinc table top so that this surface is continually cool. But the sides of the cabinet are insulated, just like an upright refrigerator, and the cold interior, with shelves, affords storage space for left-over dishes at night.

The food on this cold table, which is arranged for self-service, consists of about thirty varieties of relishes, salads and appetizers. Without desiring to inconsiderately arouse your appetite, I will only mention such delectables as stuffed eggs, spiced beets, creamed slaw, pickled onions, and big plump Norwegian sardines!

For about 37 cents' worth of German pennings you can take your plate and choose seven different helpings from the cold table. And if this still looks skimpy, you pay 50 cents and have as much as you like—something of everything if you can carry it away. There is no objection to anyone making a full meal off the cold table, as rolls, coffee and dessert would bring the check up to a profitable total. But most patrons consider the appetizers as a mere prelude to the dollar table d'hote dinner, and this preliminary course just adds an extra sum to the check.

One young attendant is sufficient to assist in serving the foods, as patrons can walk completely around the cold table and help themselves. The balance of the meal has regular tearoom service.

## MAKING THINGS EASIER FOR ICE CREAM DEALERS

D RUG stores and other retail dispensers of ice cream are enabled to obtain the latest in mechanical refrigeration and pay for them over a four-year period, with an initial payment of one dollar, through a co-operative arrangement between an ice cream company operating in several cities and a manufacturer of fountain equipment.

The ice cream company remits \$10 to the equipment manufacturers and sends them monthly the surcharge collected from the dealer on each gallon sold until the fountain is paid for. The amount of the surcharge is determined by the company's estimate of the dealer's annual gallonage requirements, and is sup-

posed to be just sufficient to wipe out the indebtedness within four years.

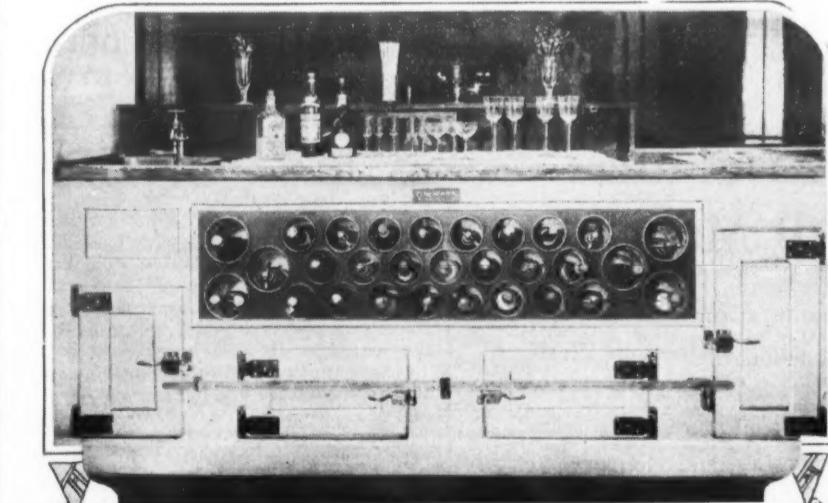
The advantages of the arrangement to the dealer are the provision for distributing the payments over a four-year period, during which the fountain is serviced free by the ice cream company. The ice cream company expects to profit by the dealer's agreement to buy its ice cream exclusively until the fountain is paid for, and also from the anticipated increased consumption of ice cream due to the improved mechanical refrigeration of the up-to-date fountain. The advantages to the fountain equipment manufacturers are the ice cream company's agreement to order all fountain equipment from them and its assumption of responsibility for payment.—*Domestic Commerce*.

## PUBLIC SHOWS LIKING FOR QUICK DELIVERIES

Bloomington, Ill.—The day has arrived when dealers are delivering not only ice machines, but also ice, according to C. U. Williams, president of the Williams Oil-O-Matic Heating Corporation, makers of Ice-O-Matic refrigerating units.

"In one respect, the selling of refriger-

## German Beerhalls Keep Apace With Progress



GERMAN beerhalls are showing great enterprise in bringing their bars up-to-date in the matter of electrical equipment.

A typical installation for converting an old-time ice-cooled bar may be handled something like this.

In the picture you will notice the cooling cylinders, row on row, for the quart wine bottles. These slant down into a water jacket inside the service counter of the bar. One or more fin type coils, suspended in this water jacket, keep the water at a low temperature, but not so low as in a brine tank, of course. Fresh water pipes may also run through this suspended jacket to supply cold

drinking water for diluting the wine. The metal tank of the water jacket is not insulated and cold from the coils inside is thrown off into surrounding compartments inside the counter, where additional liquor may be stored. You see the doors to these compartments under lock and key, in the illustration.

Beer is usually pumped up from the wooden kegs stored in the cellar below the bar, although bottled beers are sometimes cooled like wines. As a rule, the Germans do not insist that their beer be iced—to have it thoroughly chilled is sufficient. Certain wines, however, Rhine wine and champagne are relished at a low temperature.

## F. H. BROOKS HONORED AT POWER COMPANY BANQUET

Omaha, Nebr.—A big banquet was tendered Frank H. Brooks, president-elect of the Iowa-Nebraska Light and Power Co. and the Trenton Co. of Lincoln, Nebr., at the Fontenelle Hotel in Omaha, the evening of January 25. George A. Lee, vice-president and general counsel of the companies headed by Mr. Brooks, was the toastmaster for the evening.

Those giving talks during the progress of the banquet were: J. E. Davidson, president of the Nebraska Power Co. of Omaha; James Lawrence, editor of the Lincoln Daily Star; Emmett Tinley, general counsel of the Citizens Power and Light Co. of Council Bluffs, Iowa; Thorne Brown, secretary of the mid-west section of the N. E. L. A.; John Curtiss, president of the State Railway Commission, and A. V. Shotwell, Omaha attorney.

The Iowa-Nebraska Light and Power Company of Lincoln handles the General Electric refrigerator and is a part of the territory under the management of the Storz Electric Refrigerator Company of Omaha.

## REFRIGERATOR SHOP NOT HARMED BY ILLINOIS WAREHOUSE FIRE

Morrison, Ill.—Although warehouses containing products valued at about \$345,000 were destroyed by fire in November at the plant of the Illinois Refrigerator Company here, that part of the plant in which cabinets for electrical refrigerators are made was not touched by the fire. The cabinets for mechanical units are manufactured in a separate plant about two blocks from the buildings that were burned. The loss was covered by insurance.

## KING ZEERO SAFETY COOLING UNITS EVAPORATORS

for Single or Multiple, Methyl or Sulphur

Over 3,000 in operation in Chicago, ranging from 1 to 106 per compressor

## BRINE CIRCULATION UNITS, All Steel

Tested 125 lbs. air pressure

## MORRISON MFG. CO.

2315 Wolfram St., CHICAGO, ILL.

## WARWICK INSULATED CONTAINERS and Equipment for

Holding, Shipping, Carrying and Peddling

## PERISHABLE FOODS

Warwick containers are built for any product requiring uniform temperature, such as meats, pork products, fish, dairy products, ice cream, bottled goods, medical supplies and flowers.

We fabricate sheet metal, fibre and canvas goods to specification and specialize in heat, cold and sound insulation.

Inquiries solicited.

## A. E. WARWICK CO.

14 Franklin St. Stoneham, Mass.

## Five Aids To Better Installations



### IMPERIAL REFACING TOOL

This new Imperial Tool insures against leaks caused by S. A. E. couplings that do not seat properly. When scratches or other blemishes prevent an absolutely tight seat, the coupling may be refaced in a few moments with the Imperial Refacing Tool. Thus the practice of throwing away fittings and valves with damaged seats is eliminated. In use, the coupling is inserted into the correct adapter; then a few turns of the five-fluted hardened steel refacer will produce a faultless seat of just the correct size and taper for an absolutely tight and leak-proof joint.

No. 100-F Refacing Tool with adapters for sizes  $\frac{1}{4}$ ",  $\frac{5}{16}$ ",  $\frac{3}{8}$ ",  $\frac{7}{16}$ " and  $\frac{1}{2}$ ". Per Set....\$3.75

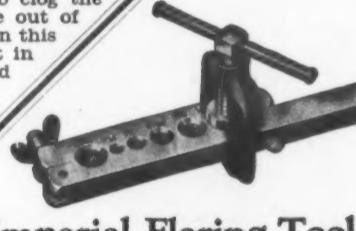
### Imperial Tube Cutter



Here is a highly efficient tool for cutting copper, brass, block tin and lead tubing. It takes all sizes of tubing from  $\frac{1}{8}$ " to  $\frac{1}{2}$ " and makes a right-angle cut, quickly and cleanly, leaving no burrs or chips to clog the line. The tubing does not become out of round as when put in a vise. When this tool is used, tubing can be cut in half the time required by old methods and a far better job results. No. 94-F Tube Cutter, each

Brass Forgings

\$2.50



The Imperial Flaring Tool gives the proper flare and taper to the tubing for making up joints. A perfect flare means a tight joint, and this tool does the work in the least time and with the utmost simplicity. No loose dies—no vise necessary. No. 93-F takes tubing sizes  $\frac{7}{16}$ ",  $\frac{3}{8}$ ",  $\frac{1}{2}$ ",  $\frac{5}{16}$ ",  $\frac{3}{8}$ ", and  $\frac{1}{2}$ ", each \$3.00. No. 95-F takes tubing sizes  $\frac{1}{4}$ ",  $\frac{5}{16}$ ",  $\frac{3}{8}$ ",  $\frac{7}{16}$ ", and  $\frac{1}{2}$ ", each \$4.00.

### Imperial Flaring Tool

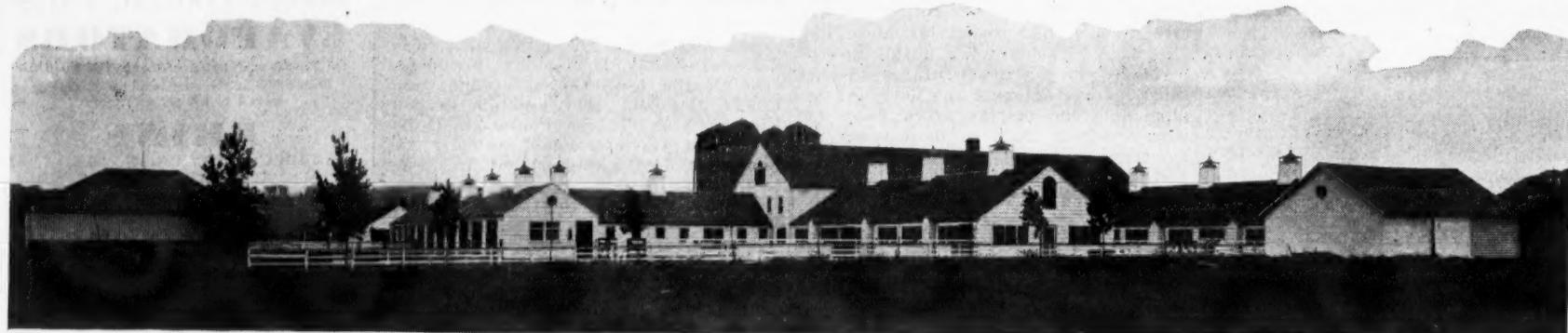
Here is a simple but most efficient device for bending tubing to any degree desired. This tool was developed in our laboratory after many tests with every method known for bending tubing. With the Imperial Tube Bender a clean, workmanlike bend can be produced in a few seconds. This tool is light in weight and most simple to use. It consists of a coil of spring steel wire with a flare at one end. To use, it is merely slipped over the tubing and brought to rest at the place where the bend is to be made. Then both tube and coil are bent by hand to whatever form desired. Seven Tube Benders comprise a complete set and each is strongly made, cadmium plated and will last a lifetime. No. 101-F Tube Bender Set for tubing sizes,  $\frac{1}{4}$ ",  $\frac{5}{16}$ ",  $\frac{3}{8}$ ",  $\frac{7}{16}$ ",  $\frac{1}{2}$ ", and  $\frac{5}{8}$ ". Per Set....\$2.75

### Imperial Tube Bender



THE IMPERIAL BRASS MANUFACTURING CO.  
565 SOUTH RACINE AVE. CHICAGO, ILL.

## Illinois Congresswoman Runs Model Dairy Farm



MORE than 500,000 quarts of high quality milk are produced yearly on the 2,400-acre "Rock River Farm" of Mrs. Ruth Hanna McCormick, Congresswoman-at-large for Illinois, who is now "stumping" the state in an effort to win the Republican nomination for the United States Senate.

The farm, which is located on the Rock River, just outside of Chicago, has hundreds of fine Holstein cattle. The entire herd is under federal veterinary supervision. Approximately 2,000 bottles of Rock River certified milk are shipped into Chicago daily, and electric

refrigeration keeps the milk in a safe and pure condition until it is delivered to private homes.

A Vilter refrigeration system is used on the farm for milk cooling. A test, lasting 37 days, was made with this system. At the end of that time the milk was found to be chemically as pure and safe as when the experiment was started. An accessory to the general refrigerating process, and one which contributes greatly to the better care of the milk while in the cooler, is the Burrell Spray pasteurizer, which is used on the farm. This was installed for the purpose of having several daily milkings cooling continuously, thus making it necessary to bottle the milk only once every 24 hours.

### D. S. STOPHLET, INC., APPOINTS DEALER IN RACINE

**Madison, Wis.**—D. S. Stophlet, Inc., distributor of General Electric refrigerators in southern Wisconsin, announces the appointment of the Standard Home Utilities as a dealer in Racine, Wis., in addition to Foster's, Inc.

P. E. Rinehart, formerly division manager for D. S. Stophlet, Inc., has been appointed manager of the Standard Home Utilities.

### KELVINATOR DISTRIBUTOR LEASES NEW QUARTERS

**Lynn, Mass.**—Nelson-Russell, Inc., Kelvinator distributors, have leased new quarters, which will give them approximately four times as much floor space as they now have at 61 Sillsbee St.

The new location is on Union St., adjacent to the new million dollar Paramount Theatre. Nelson-Russell will be located in their new quarters about March 1.

### ROBIN & SONS TO HANDLE OIL-O-MATIC IN HARTFORD

**Hartford, Conn.**—M. Robin & Sons, Inc., 4 American Row, was recently organized to take over the distribution of Oil-O-Matic equipment in the Hartford territory. The company has showrooms at the above address and maintains a shop and offices at 49 Hillside Avenue. Samuel Robin, Raymond Robin and Ida Robin are directors of the company.

## REFRIGERATOR RIDES IN RUMBLE SEAT

By Ruel McDaniel

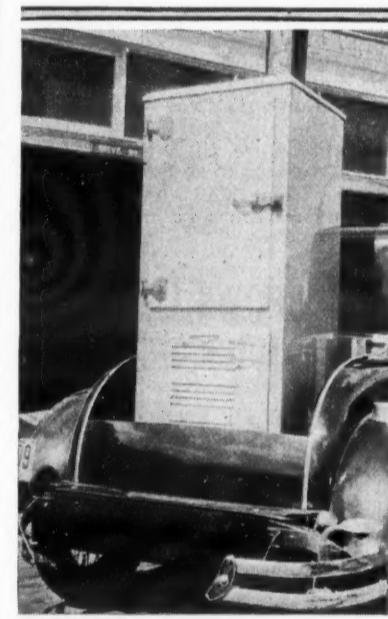
OUT in the so-called "wild west" they still are interested in ranches and round-ups and the price of steers on the hoof, but they likewise are ready to listen to the man who has something to tell them about modern automatic refrigeration. That is the experience of Frank H. Scheck, who owns the Scheck Battery & Radio Station, of Albuquerque, New Mexico, and handles Copeland electric refrigerators.

He has found that a few people will come to the store and ask about the refrigerator; but the majority are waiting for some one to go out and tell them,

mountain ranges. Some of these routes are not so good. Delivery of heavy merchandise like refrigerators is a difficult job in many directions out of the city, and prospective buyers are infrequent because the territory is thinly populated.

Mr. Scheck not only conquers the mountain roads to make deliveries, but he finds it so practical to haul refrigerators over the mountains that he carries a sample along on the back of his car. When he finds a man who is ready to listen to the virtues of electric refrigeration, he has a real machine right there to show him. He takes no chances of the prospect coming to town to see for himself. By carrying a sample as he goes, Scheck finds that sometimes it is possible to make the first call the last call, so far as the actual selling is concerned.

And Mr. Scheck's general policy of overcoming natural sales obstacles not only sells refrigerators in the mountains, but it helps him to close deals nearer at hand. There was, for example, a meat owner who bought two large ice boxes and got them on his floor the morning Scheck dropped in to talk about electric refrigeration. Outwardly it would seem that this man would be a poor prospect with several hundred dollars tied up in brand new boxes. But the fact did not stop Scheck. He went after the merchant strongly and the outcome was that Scheck sold the equipment for one of the boxes to be changed into a mechanical unit, as well as another electri-



so he does just that. But in New Mexico it is not as simple as it sounds.

Mr. Scheck does not depend upon Albuquerque alone for his business; yet to go out of the city entails considerable resourcefulness. The accompanying pictures show how he handles the situation. In practically every direction from Albuquerque roads lead through

short thing, principally to get name, financial means, and whether or not interested in electric refrigeration.

"To get the women to work conscientiously, we offered them 3 per cent on all sales made from prospects which they handed in. We paid them \$15 a week salary in addition, which we split with the salesman to whom she is assigned. He is her boss.

"So far the two women have been averaging around 10 names a day worth the attention of the salesmen, out of which two or three have been closed. This has enabled the women to make around \$40 a week with the commission, which, of course, causes them to work carefully.

"But the effect on the salesman is the great thing. He isn't worn out by wasted effort. The plan has actually doubled his time before genuine prospects. He is in a different frame of mind than is possible when facing the rigor of routine-digging for prospects. He can use his ability to the best advantage.

"The women don't have to sell, yet have commission possibilities. The salesmen who are specialists in closing can close. While we didn't get our new plan into operation until the middle of January, it is what put us over the top with our quota."

## COPELAND CLOSES DEAL WITH UNITED MOTORS

**Mt. Clemens, Mich.**—A connection with United Motors Service, Inc., through which all service and replacement of motors used in Copeland electric refrigeration will be handled by that organization, has just been announced by the Copeland Sales Company of Mt. Clemens, Mich.

Through this connection quick service and replacement is possible in any part of the country through the branch system of United Motors Service, which maintains branches in 27 key cities of the United States, where large stocks of genuine parts are stored. By genuine parts is meant parts taken from the same standard stocks used in the building of the original complete equipment.

Branches of United Motors Service are located at Atlanta, Boston, Buffalo, Chicago, Cincinnati, Cleveland, Dallas, Denver, Des Moines, Detroit, Indianapolis, Kansas City, Los Angeles, Memphis, Milwaukee, Minneapolis, New Orleans, New York, Oakland, Calif.; Omaha, Philadelphia, Pittsburgh, Richmond, Va.; San Francisco, Seattle, St. Louis and Toronto, Ont.

As the official field and service organization for the Delco Products Corporation at Dayton, Ohio, United Motors is completely equipped to service the motors used in Copeland refrigeration.

## LAM JOINS CINCINNATI WAGNER BRANCH

**Cincinnati, Ohio**—Otis F. Lam, formerly connected with the Day-Fan Electric Co. and the Delco-Products Corp., recently joined the local branch of Wagner Electric Corp.

**WELCOME to NEW YORK and The HOTEL GOVERNOR CLINTON**  
31<sup>ST</sup>. ST. AND 7<sup>TH</sup>. AVE.  
opposite PENNA. R.R. STATION

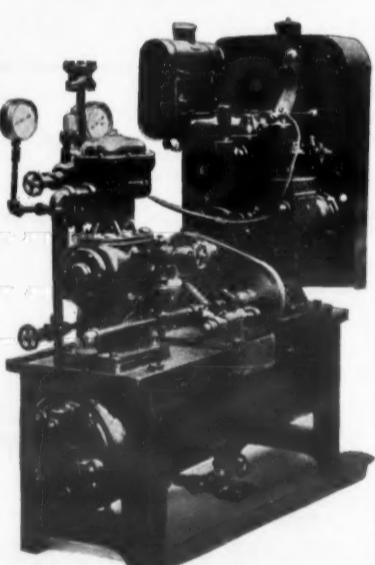
1200 Rooms each with Bath and Servidor  
ERNEST G. KILL Gen. Mgr.

ROOM AND BATH 3<sup>00</sup> UP

## NOW!

You can sell those big prospects who have no electricity.

Fill their orders with



### Gas-Engine Driven Units

For commercial use, in dairies, country stores, plantations, summer resorts, on fishing boats, export work, etc.

The standard Frick Unit with gasoline engine in place of the usual motor.

Floor space required only 3' 8" by 1' 6". Operates semi-automatically.

Write for full details.



## Electric Refrigerator Truck Specialists

During the past five years we have handled over 28,000 electric refrigerators in the New York Metropolitan area.

## We Are Expert Handlers—All Sizes—All Makes

For electric refrigerator manufacturers—distributors, and dealers doing business in Westchester County and Greater New York City—we offer a service that includes unloading from freight cars to warehouses and delivery to individual homes and apartment houses in the most modern padded vans.

## SUNSET

EXPRESS & TRUCKING CO., INC.

Main Offices  
400 E. 75th St.  
New York City

Warehouse  
302 E. 61st St.  
New York City

## WOMEN ADVANCE AGENTS PAVE WAY FOR SALESMEN

**A. MORRISON**, sales manager of the Cleveland factory branch of Kelvinator, led the United States in percentage of quota obtained for January, with a record of 122 per cent.

"During the few months," Mr. Morrison explained, "I have had charge of the local selling organization, the small amount of time actually 'put in' with a prospect, by good salesmen, has been a source of constant worry to me. Good salesmen, men we knew to be good, when we put them out pounding the pavement, ringing door bells, we wore the edge off them.

"In addition to only spending about 1 1/2 to 2 hours actually in the presence of a prospective buyer, talking Kelvinator, they were too exhausted to be the men we knew them to be when it came to closing.

"How to increase their time before prospects? What to do about it? The everlasting problem.

"I took a chance on trying out women to pull the grain from the chaff. The response, to an ad in a local paper, was 75 women of all varieties.

"I finally selected two, and made up the survey form given below for them to use in conducting interviews. Just a

Date.....

Name.....

Address..... Tel. No. ....

Married..... No. in family.....

Home owner.....

Employed at present.....

What type refrigeration used.....

Interested in electric refrigeration.....

If so, what make.....

Who is the buyer.....

What is approximate ice bill per month.....

Prospect to be seen—Date..... Hour.....

If no definite appointment can be arranged, when, in your opinion, is the best time to call.....

Above to be filled out either during or immediately after interview.

Reported by.....

short thing, principally to get name, financial means, and whether or not interested in electric refrigeration.

"To get the women to work conscientiously, we offered them 3 per cent on all sales made from prospects which they handed in. We paid them \$15 a week salary in addition, which we split with the salesman to whom she is assigned. He is her boss.

"So far the two women have been averaging around 10 names a day worth the attention of the salesmen, out of which two or three have been closed. This has enabled the women to make around \$40 a week with the commission, which, of course, causes them to work carefully.

"But the effect on the salesman is the great thing. He isn't worn out by wasted effort. The plan has actually doubled his time before genuine prospects. He is in a different frame of mind than is possible when facing the rigor of routine-digging for prospects. He can use his ability to the best advantage.

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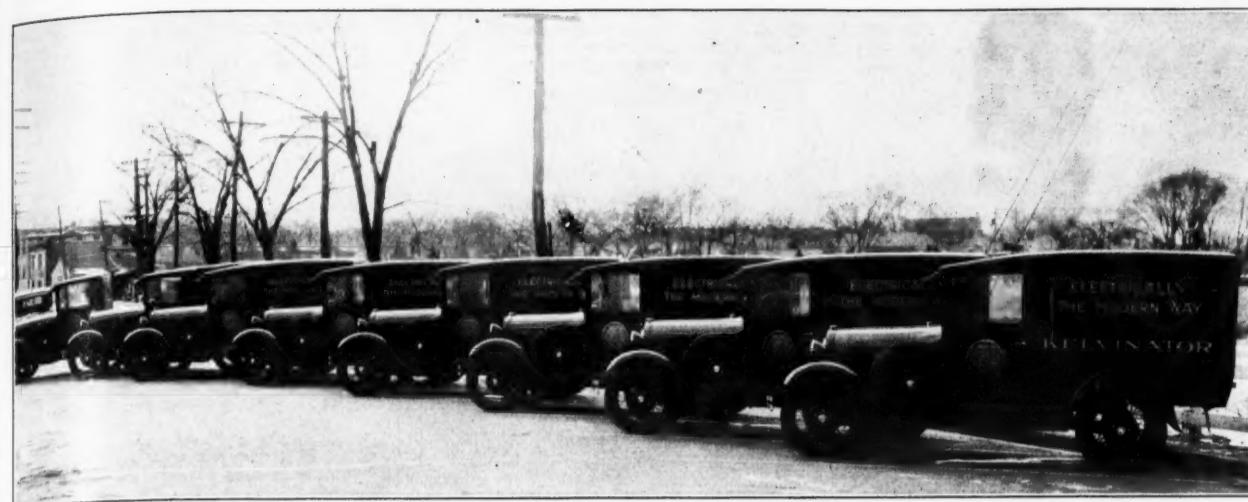
## SUNSET

EXPRESS & TRUCKING CO., INC.

Main Offices  
400 E. 75th St.  
New York City

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## Fleet on Wheels Carries Message of Refrigeration to Binghamton Housewives



SLOGANS are helping to advertise a number of products to the buying public, and "Electrically the Modern Way, Kelvinator" is the message that the Associated Gas & Electric Company of Binghamton, N. Y., is putting across.

### DETROIT ENGINEERS PLAN SERVICE PROBLEM SESSION

Detroit, Mich.—Problems of the serviceman will be considered by the Detroit Section of the American Society of Refrigerating Engineers at its regular monthly meeting March 3, which will be held at the Masonic Temple.

An informal dinner will precede the discussion. After the dinner those present will adjourn to the meeting room. They will take up questions pertaining to service.

It is expected that a number of service managers of mechanical refrigeration companies will attend.

### SUBJECT WOOD CABINETS TO HIGH HUMIDITY TESTS

(Concluded from page 16, column 5) to the fact that aluminum paint is much more effective than ordinary varnish in keeping moisture out of the wood. Except for slight checking of the enamel coats, natural under the very trying conditions to which the box was subjected, the paint finish was in good condition and unstained. There was slight checking of the wood at a number of places where the end grain was exposed, and the fiber wood backing had absorbed considerable moisture, causing it to bulge. The moisture content of the wood in this box increased only 5.5% during the test, as compared to 8.9% and 9.9% for the first two boxes. Glue joint failures were minor in character, all on the front of the box, and there were indications that these were due to the penetration of condensed moisture around the edges of the doors, rather than to absorption of water through the paint.

The cooling efficiency of this refrigerator did not decrease during the five weeks of severe test conditions, nor did its ice-melting rate increase by even one-hundredth of a pound per hour.

The data on moisture content of different parts of the boxes and on the construction details show clearly the advisability of certain measures, applying both to refrigerator manufacture and in part to domestic refrigerators now in use.

1. The clearance ordinarily provided between doors and door frames of refrigerators is far greater than necessary, and either should be reduced, or a bearing of sponge rubber provided to prevent air leakage around the doors. The effect of other factors on efficiency of the test boxes could not be determined with certainty until this major factor was eliminated by use of sponge rubber. Such strips can be easily and cheaply applied to most domestic refrigerators in use, with consequent economy in ice.

2. Great care should be taken to prevent air leakage around the drain pipe. Refrigerators in use should be checked up to make sure air cannot enter the wall construction at this point.

3. A coat, or preferably two coats, of aluminum paint (aluminum-bronze powder mixed with varnish) will prevent surface discoloration and the direct absorption of water by the wood exterior to an extent likely to damage the refrigerator during a summer of extreme exposure. Such a coat of paint can easily be applied by any householder, and will greatly prolong the useful life of a domestic refrigerator.

4. The particularly trying conditions to which refrigerator doors and door frames are exposed make it desirable from the manufacturing viewpoint that

This fleet of trucks is used to advertise and deliver Kelvinators and other electrical appliances.

These trucks are finished in colors which have great "eye appeal. The panels are bright red, with black trim-

the wood used for these parts be protected against moisture changes by one or another of the treatment materials or design expedients available for this purpose.

The question naturally suggests itself as to whether the five weeks of extreme exposure to which these refrigerators were subjected is more or less than equivalent to that of a southeastern summer. If the amounts of moisture absorbed were as much or more than found in domestic refrigerators after a summer of use, it would appear that the test conditions were at least equivalent to practical use conditions.

The moisture absorption of the test refrigerators therefore was checked by purchasing and tearing down a number of domestic refrigerators which had been in use for a number of years in the city of Washington, D. C. The moisture content of the wood in these boxes was less in general than that of the test boxes "A" and "B," indicating that the five weeks' period of extreme exposure given the latter were more than equivalent to a whole summer of ordinary use.

What is the difference in cost between the multiple unit and the self-containing unit," Col. Ladue asked.

The witness said the difference was from \$50 to \$75 per apartment, but said that trade discounts cut this down materially.

The witness criticised the section which provides for annual inspection. He said it would work a handicap on the users of remote systems, through the addition of an annual inspection fee, which he termed "unwarranted and wholly unnecessary."

Mr. Smithson presented an exhaustive statement, taking up the proposed regulations paragraph by paragraph, and the bulk of discussion took place around his statement.

At the outset of his testimony, Mr. Smithson said that various sections of the regulations were designed to discriminate against the multiple unit type of refrigerating systems. Col. Ladue objected to this statement.

"These regulations," Col. Ladue said, "are designed only to protect the public health. They were not intended to discriminate against any particular type of refrigerating system. I want to criticize your use of the expression 'designed to do so and so.'"

Taking up paragraph (b) of section 11-b of the proposed regulations, which would prohibit installation of mechanical refrigeration systems in "wards or private rooms of hospitals, sleeping quarters of asylums, cell blocks of institutions, or any place where people are confined or helpless," Mr. Smithson suggested it be clarified to cover only systems "hereinafter instaled."

Mr. Smithson was joined in his opposition to annual inspection by C. L. McCrea, of Washington, D. C., representing the National Electrical Supply Company, distributors of General Electric refrigerators. Mr. McCrea said annual inspection of portable types of refrigerators was virtually impossible.

Mr. McCrea also said he favored elimination of all inspection of class "D" and "E" systems. In this he was joined by E. T. Williams.

Fearful that section 101 of the proposed code, which states the regulations are intended to apply "to every installation of refrigeration apparatus and to the storage of reserve refrigerant," would be applied retroactively, Mr. Smithson suggested it be clarified to cover only systems "hereinafter instaled."

Quite a discussion hinged around the definition of "flammable refrigerant," in section 205 of the regulations. The section defines as flammable any refrigerant "which will burn or explode when mixed with air, such as ethane, propane, butane, iso-butane, ethyl chloride and methyl chloride."

Mr. Smithson said the words "or explode when mixed with air" should be eliminated, because "it is felt by engineering societies and associations and persons engaged in the refrigerating industry that these refrigerants will not explode except under rare, unusual and almost inconceivable conditions."

Mr. Starr suggested that the commission leave to the Bureau of Mines the definition of the toxic effect of the various refrigerants and, after some discussion, Col. Ladue agreed with Mr. Starr that this should be done.

Mr. Smithson objected to the classification of methyl chloride as an irritant. He said it was not an irritant and should not be so classified. This statement was concurred in by J. B. Churchill, of New York, a director of the A. S. R. E., and representing the Ice Master Company, of Haverhill, Mass., E. T. Williams and Thomas Coyle, of Roessler & Hasslacher Chemical Company, Niagara Falls, N. Y.

He said he thought the regulations should be amended to prohibit the use of mechanical systems using toxic refrigerants, "at least above the first floor in any building."

There are non-toxic liquids which have been in use since 1868," Mr. Starr declared. "In addition the Bureau of Mines is working on a liquid for use in compressing machines, which will be absolutely safe."

Continuing, Mr. Smithson strongly opposed the sections which would require

particularly attacked the fees proposed for inspection and reinspection.

The fees set forth in the proposed code are:

Class A—\$20, and \$1.00 additional for each separate refrigerated space or connection.

Class B—\$10 and \$1.00.

Class C—\$5 and \$1.00.

Class D remote systems—\$2.00 and \$1.00.

Class D unit systems and Class E—\$1.00 each unit.

The fee for annual reinspections of remote systems is set at \$3.00 for each test.

Section 502 of the proposed regulations provides that systems containing over twelve pounds of refrigerant, and which are assembled and piped in place, shall be tested by the installer in the presence of the inspector of plumbing. It also sets forth how the tests shall be carried out.

Mr. Smithson protested against this section, as did Mr. McCrea. The former said it would work hardship on certain types of commercial systems and on ice cream cabinets.

Questioned by Col. Ladue, the witness said that if the section must be left in the regulations, it should be amended to limit its application to systems using over twenty pounds of refrigerants, instead of those using over twelve pounds.

Mr. Smithson also protested section 504, which prescribes the type of pipe to be used, with a proviso that new seamless copper or other suitable metal tubing may be used, provided all joints are sweated, brazed, or provided with an approved union flared joint.

He objected to this because, he said, it omitted flare joints. He said that the flared joint is the safest that has been developed. None of the joints mentioned in the section, he said, had proved practicable in actual use.

The witness urged that the entire section 506, which details the method of installation of remote class "C" or "D" systems, be eliminated and that the method approved by the National Board of Fire Underwriters be substituted for apartment house installations.

Considerable discussion centered around section 615, which provides that an irritant refrigerant, not readily apparent to a human sense, must have a substance added to it to make it apparent. This applies only to systems using more than five pounds of refrigerants, however.

Mr. Smithson thought the section should be amended to read "any refrigerant harmful to health, which is not readily apparent to a human sense shall have added thereto a substance to make it so apparent."

E. T. Williams said he thought the section should be left intact. He said there was a "very simple device," which, in the event of escape of any refrigerant, would shut down the system and sound an alarm. Mr. Churchill also said the section should be carried as proposed by the commissioners.

Mr. Smithson objected to the provisions of section 802, which requires a

makers' or owners' representative to be present during the period of operation of any refrigeration system used for public exhibition. He said it should be clarified to provide that no operator be required except when the exhibition is open to the public. As he read the commissioners' proposal, he said, it would be necessary to keep an attendant with the machines at all times, even when the exhibition had closed to the public.

John Lorsch, of Engineers' Union No. 99, said Congress had passed a law, which President Coolidge had signed, providing that a responsible engineer should be in charge of all such machinery when in operation.

Rufus S. Lusk, of Washington, D. C., executive secretary of the Operative Builders' Association, took issue with Mr. Lorsch as to the intent of the law. Mr. Lusk admitted that, strictly interpreted, the law would require an engineer to operate vacuum cleaners, refrigerators, and every type of household electrical appliance.

However, he declared, that was not the intent of it. He said that before it was signed by President Coolidge, the latter conferred with the corporation counsel of the District of Columbia, who explained to the President that the law was not meant to cover household appliances.

Col. Ladue set February 17 as the date within which interested parties might file briefs. In addition, he granted two days' additional time for filing of reply briefs. No indication was given as to when the commissioners would reach a decision as to adoption of the proposed regulations.

Others who appeared at the hearing were H. Harrison, of New Brunswick, N. J., for the Brunswick-Kroeschell Company; Walter M. Ballard, of the Walter M. Ballard Company, Washington, D. C.; Gordon Lyle, of Washington, D. C., for the Weisbach Company, Gloucester, N. J.; Edwin Love, of the Refrigerating Machinery Association; C. G. Achstetter, acting fire marshall of the District of Columbia; Fremont Wilson, consulting engineer, of New York City, and G. E. Wagner, of Barber & Ross, Washington, D. C.

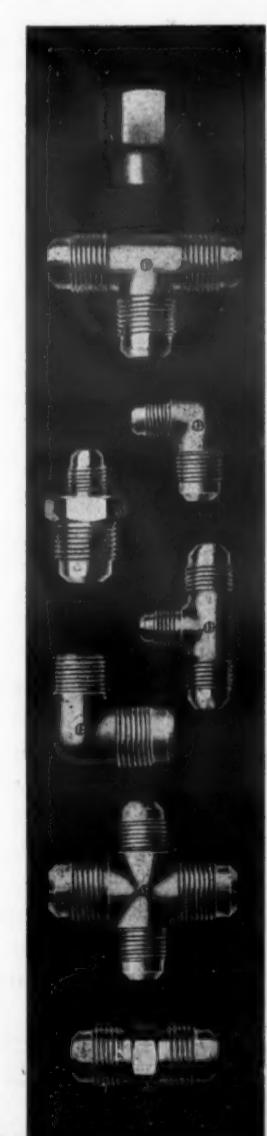
### ELECTRO-KOLD SALES CORP. ORGANIZED

Spokane, Wash.—Electro-Kold Sales Corp. was recently organized to take charge of the sale of electric refrigerators manufactured here by the Electro-Kold Corp. Directors are Horace L. Masterson, E. S. Matthews and Lloyd E. Gandy.

### REFRIGERATION PLACING BURDEN ON UTILITIES

Detroit, Mich.—"Refrigeration, home heating and timekeeping," Alex Dow, president of the Detroit Edison Co., said on January 21, "have placed new burdens on public utility companies. Continuity of service is the outstanding responsibility of the public utilities to users of electric current."

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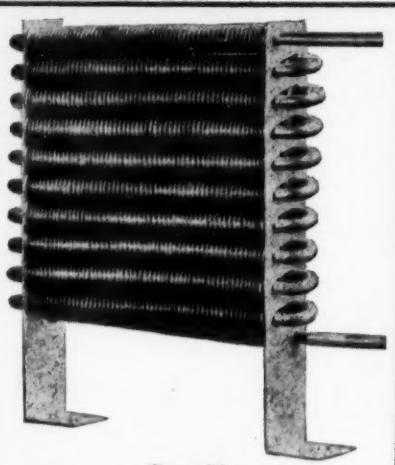
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## OMAHA COMPANY REPORTS 43% GAIN IN 1929 SALES

Omaha, Nebr.—Harry Lapidus has been elected president of the Omaha Fixture and Supply Co. Other officers are Henry Monsky and Harry Malashock, vice-presidents; Irvin Stalmaster, secretary; and Charles Betts, sales director.

The Omaha Fixture and Supply Co. during the last two years has given special attention to counters suitable for groceries and meat markets. Cases of all kinds, designed for electric refrigeration use by grocers and butchers, are now regular products of the company.

A 43 per cent increase of business in 1929 over the year 1928 was reported. A cash dividend of six per cent was declared on all stock at the annual meeting. Mr. Lapidus reports the business outlook as the most favorable the company has had over a period of ten years.

### ROLLER-SMITH AUGMENTS SALES PERSONNEL

New York, N. Y.—Several changes have been made in the sales organization of the Roller-Smith Co., 233 Broadway. M. W. Seymour, formerly located at the company's works in Bethlehem, Pa., is now associated with the New York office as a sales engineer. Mr. Seymour is a graduate of Brown University.

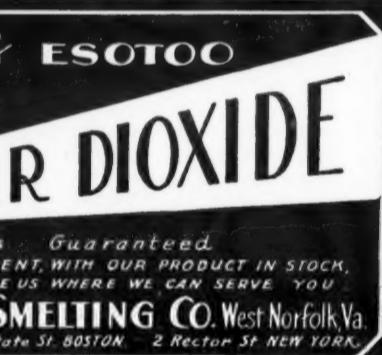
H. D. Stier, 101 Marietta St., Atlanta, Ga., now represents the company in the states of Alabama, Florida, Georgia, North Carolina, and South Carolina.

H. N. Muller Co., First National Bank Building, Pittsburgh, Pa., is now representing the Roller-Smith Co. in western Pennsylvania, West Virginia and the Youngstown district of Ohio. Associated with Mr. Muller are H. E. Ransford and F. E. Harper.

### LEPPE HEADS CHICAGO CONSULTING ENGINEERS

Chicago, Ill.—Chicago Association of Consulting Engineers met at the City Club, 315 Plymouth Court, Monday, January 20, and held its annual election of officers. Three members were re-elected to their former positions: Ernest V. Leppe, president; Rollo E. Gilmore, vice-president, and H. L. Clute, 307 N. Michigan Ave., secretary-treasurer.

Following the election of officers, A. H. Goetz gave an illustrated talk on the "Trend of Refrigeration."



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### Scientific and Historical Data of the Refrigeration Industry

A CLEAR explanation of the scientific laws on which mechanical refrigeration is based and the historical background of the refrigeration industry are given in the court proceedings in the famous

### Frigidaire-Absopure Patent Suit

The complete proceedings of the trial, which took place at Bay City, Michigan, March 18-23, 1929, together with the official decision of Judge Tuttle, have been reprinted in a 48-page special supplement.

The expert testimony recorded in this document furnishes a most illuminating exposition of the various refrigeration processes and a valuable picture of the historical development of the industry.

The Supplement will be sent postpaid to any address for one dollar per copy. Remittance must accompany order.

### Electric Refrigeration News

550 Maccabees Bldg.

Detroit, Mich.

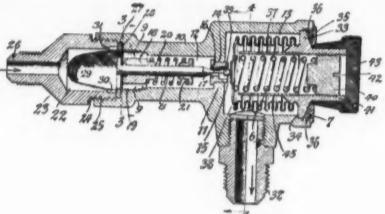
## CURRENT INVENTIONS IN

### ISSUED JANUARY 7

1,742,194—METHOD OR ART OF AND APPARATUS FOR MAKING ICE. George L. Bennett, Cleveland, Ohio. Filed Apr. 15, 1925. Serial No. 32,237. 9 Claims. (Cl. 62—172.)

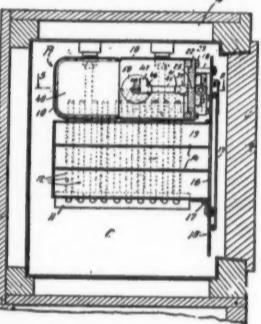
1,742,195—WEATHER STRIPPING. Maurice E. Bosley, Chicago, Ill., assignor to The D. W. Bosley Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 20, 1927. Serial No. 214,370. 7 Claims. (Cl. 20—69.)

1,742,323—EXPANSION-VALVE MECHANISM FOR REFRIGERATION. Franklin G. Slagel, Buffalo, N. Y., assignor to Feeders Manufacturing Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed July 5, 1927. Serial No. 203,302. 1 Claim. (Cl. 50—23.)



An expansion valve mechanism comprising a casing having an inlet chamber, an outlet chamber and a port connecting said chambers, a valve arranged in said inlet chamber and movable toward and from said port and having a shifting pin projecting through said port into said outlet chamber, a head closing the outer end of said outlet chamber and provided with a tubular neck, a diaphragm arranged in said outlet chamber and having an accordion wall one end of which is secured to said casting head and a head arranged on the opposite end of said accordion wall and adapted to engage said pin, a spring arranged within the diaphragm and engaging one end with the head thereof, a screw plug working in said neck and engaging with the other end of said spring, and a cap of heat insulating material applied to the outer side of said neck.

1,742,622—REFRIGERATION APPARATUS. Alfred Morris Thomson, Newark, N. J., assignor to Joseph Mercadante, New York, N. Y. Filed June 10, 1927. Serial No. 197,788. 14 Claims. (Cl. 62—126.)



13. In a refrigerating system a refrigerating unit including a container for liquid and a gaseous refrigerant, means for supplying a refrigerant to said container in liquid form, and movable means acting simultaneously to withdraw the gasified refrigerant from said container and to skim foreign liquid from the surface of the liquefied refrigerant in said container.

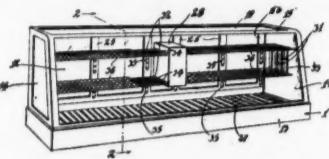
### DRINKING WATER FAUCETS

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Refrigerators — Water Coolers  
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1,742,624—REFRIGERATED SHOWCASE. Karl Albert Weber, Los Angeles, Calif., assignor to Weber Showcase & Fixture Company, Los Angeles, Calif., a Corporation of California. Filed July 28, 1926. Serial No. 125,392. 7 Claims. (Cl. 62—37.)



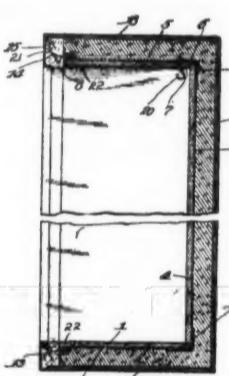
1. In a refrigerated showcase, the combination of insulated front, bottom, rear, top and end sections, a container mounted within the showcase, a plurality of return circulation pipes connected at points near the upper and lower ends of the said container and adapted to convey cooling brine longitudinally of the showcase by gravity circulation and to support display trays and means within the container, for cooling the brine solution each of said pipes, including vertically spaced branches connected at their outer ends by a communicating pipe and at their inner ends through the container.

1,742,731—ROTARY COMPRESSOR. William E. Shore, West New Brighton, N. Y. Filed Jan. 10, 1927. Serial No. 160,193. 6 Claims. (Cl. 230—153.)

3. A rotary compressor, comprising a cylindrical casing, a shaft mounted eccentrically of said casing, a cylindrical rotor on the end of the shaft supported within said casing and having a transverse slot through its axis, a cap closing the cylindrical casing, a disc rotatably mounted in said cap concentric with the casing and having a slot extending through its axis, and an impeller vane sliding in the slot in the rotor and engaging the inner walls of the cylindrical casing in constant contact, said vane having a rigid extension of a length less than the diameter of said disc arranged in a plane right angular to the plane of the vane and engaging the walls of the slot in said disc in sliding contact.

1,742,900—CYLINDER FOR ICE CREAM FREEZERS. Harry Clemson Cover, Baltimore, Md., assignor of one-half to Lionel Manuel Hendler, Baltimore, Md. Filed Sept. 15, 1927. Serial No. 219,645. 2 Claims. (Cl. 220—10.)

1,742,923—REFRIGERATOR LINING. George R. Meyercord, Chicago, Ill., assignor to Haskelite Manufacturing Corporation, a Corporation of New York. Filed Apr. 21, 1928. Serial No. 271,705. 4 Claims. (Cl. 217—3.)



1. A lining for a refrigerator comprising slabs of vitreous material arranged in contact with each other to form a bottom wall, a back and two side walls of a lining, a panel of metal-sheathed lumber engaged with the upper ends of the side and back walls to form the top of the lining, and elements cemented to the exterior of the lining to hold the parts together.

### PATENTS

Searches, reports, opinions by a specialist in REFRIGERATION  
H. R. VAN DEVENTER  
Solicitor of Patents - Refrigeration Engineer  
342 MADISON AVE. NEW YORK

1,742,975—PROCESS AND APPARATUS FOR MELTING SOLID CARBON DIOXIDE. Josef Stoffels, Esslingen, Germany, assignor to Maschinenfabrik Esslingen, Esslingen, Germany. Filed Mar. 29, 1929. Serial No. 351,024, and in Germany Apr. 7, 1928. 3 Claims. (Cl. 62—170.)

1. Process for melting solid carbon dioxide which consists in extracting sufficient cold from the carbon dioxide to melt the same, and running the resulting liquid into containers, while maintaining the latter cool by means of the cold extracted from the solid carbon dioxide.

1,742,994—ICE-SCORING MACHINE. George Komp, Sr., Hattiesburg, Miss. Filed July 30, 1928. Serial No. 296,191. 6 Claims. (Cl. 125—13.)

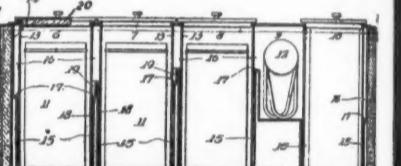
1,743,073—TEMPERATURE CONTROL DEVICE. Albert H. Simmons, Whittier, Ill., assignor to Edison Electric Appliance Company, Incorporated, Chicago, Ill., a Corporation of New York. Filed Aug. 3, 1926. Serial No. 126,869. 14 Claims. (Cl. 200—138.)

1. A temperature control device comprising a thermostat, means for causing said thermostat to move quickly from one position to another, and flexible control means associated with said thermostat, said control means being arranged to flex to permit free distortion of said thermostat upon excessive temperature changes.

### ISSUED JANUARY 14

1,743,434—FASTENER. Otto P. Cramer, San Francisco, Calif. Filed Jan. 11, 1927. Serial No. 160,601. 3 Claims. (Cl. 292—202.)

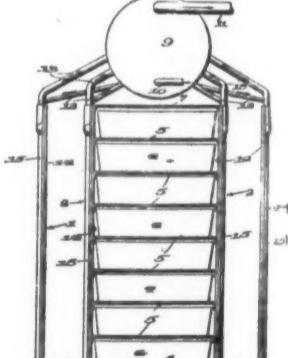
1,743,651—ICE CREAM REFRIGERATOR. Charles L. Bastian, Chicago, Ill., assignor to The Bastian-Blessing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 29, 1927. Serial No. 243,222. 5 Claims. (Cl. 62—95.)



2. An ice cream refrigerator comprising a liquid-tight compartment adapted to receive a can of ice cream, and means for confining and sealing from the compartment a relatively thin body of refrigerating medium outside of and around the lower portion of the compartment, and a larger body of refrigerating medium outside of and around the upper portion of the compartment.

1,743,839—DOOR FASTENER. Tandy R. Wear, Colton, Calif., assignor by mesne assignments, to W. H. Miner, Inc., a Corporation of Delaware. Filed Sept. 20, 1924. Serial No. 738,733. 1 Claims. (Cl. 268—72.)

1,743,896—EVAPORATOR FOR REFRIGERATING MACHINES OF THE FLOODED TYPE. Abraham J. Kusek, Ashburton, Baltimore, and George W. Gall, Ruxton, Md., assignors to Kular Corporation of Delaware. Filed July 7, 1927. Serial No. 204,105. 9 Claims. (Cl. 62—95.)

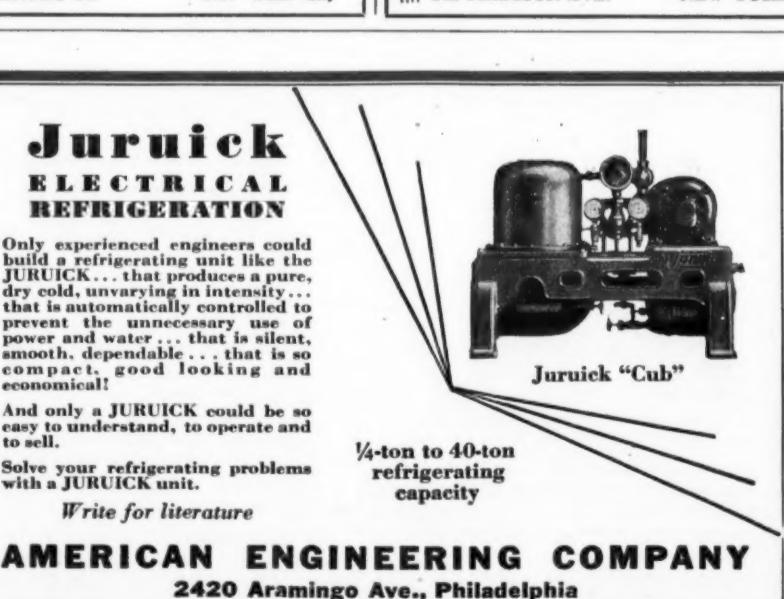


1. In a refrigerating machine of the flooded type, the combination with a liquid refrigerant receiving main header of a series of hollow plate-like evaporator units, said evaporator units each comprising a flat plate and a superimposed corrugated plate, and inlet and outlet connections between said header and evaporator units.

1,743,917—DISPENSING DEVICE. John E. Henderson, Fort Myers, Fla. Filed Feb. 16, 1928. Serial No. 254,790. 1 Claim. (Cl. 312—36.)

1. A dispensing device comprising a housing, a vertically disposed stationary guide in which bottles are adapted to be disposed in contact with the guide, a curved track for guiding bottles in the lower end of the stationary guide, said stationary guide having an opening adjacent the lower.

1,744,024—ICE-DISPENSING APPARATUS. Everett D. Brodhead, Dallas, Tex., assignor to Ideal Ice Vending Machine Company, a Corporation of Texas. Filed Apr. 10, 1928. Serial No. 268,856. 4 Claims. (Cl. 193—40.)



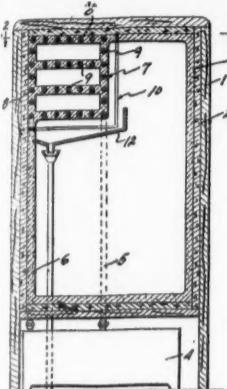
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# THE REFRIGERATION FIELD

ISSUED JANUARY 21

1,744,038 — REFRIGERATING UNIT. Lloyd G. Copeman, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed Nov. 25, 1927. Serial No. 235,633. 8 Claims. (Cl. 62—95.)



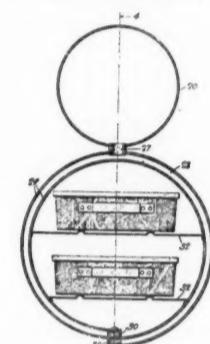
and means operable from a point without said shaft alley for controlling said valve.

ISSUED JANUARY 28

1,744,750 — CALORIMETRIC BOMB FOR THE CATALYSIS OF AMMONIA. Giovanni Cicati, Bologna, Italy, assignor to Societa Brevetti Cicati, Anonima, Padova, Italy, a Joint Stock Company. Filed June 19, 1925. Serial No. 38,386, and in Italy Feb. 16, 1925. 2 Claims. (Cl. 23—289.)

1. In a calorimetric bomb for the high pressure catalysis of ammonia, a catalyst tube in the bomb, means for withdrawing gases from said tube, means for passing gases to said bomb in two streams, means for passing one of said streams in heat exchange relation with said tube, means for passing the other of said streams in heat exchange relation with the wall of said bomb and with a portion only of the gases issuing from said tube, means for introducing said streams after said heat exchange into said tube.

1,744,772 — REFRIGERATING APPARATUS. Jesse G. King, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 24, 1925. Serial No. 71,170. Renewed Sept. 22, 1927. 11 Claims. (Cl. 62—95.)



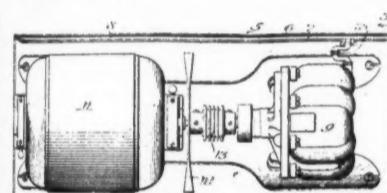
2. An evaporator for refrigerating apparatus comprising a single sheet of metal wound into a spiral coil, and a pair of spacing means each secured to one end edge of the sheet and to the side of the sheet to form a substantially annular chamber, the ends of the chamber being closed.

5. Refrigerating apparatus comprising, in combination, a cooling device comprising a header forming a reservoir for liquid refrigerant, one or more hollow sheet metal walls connected to the header, the walls being arranged to form a plurality of refrigerant circulating paths in parallel circuit relation, port-means for admitting liquid refrigerant to said header, a second port-means for withdrawing refrigerant vapor therefrom, and means for maintaining in the cooling unit a level of liquid refrigerant at all times sufficient to maintain liquid refrigerant in contact with said sheet metal walls up to the height of the header whereby to establish substantially uniform wall temperature opposite the liquid refrigerant.

1,744,070 — REFRIGERATED DISPLAY CASE. Edward F. Deacon, St. Louis, Mo., assignor, by mesne assignments, to Brecht Casing Company, St. Louis, Mo., a Corporation of Delaware. Filed Feb. 26, 1927. Serial No. 171,134. 1 Claim. (Cl. 312—138.)

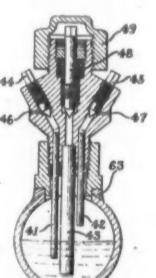
A refrigerator case provided with two service doors, and means for supporting said doors to cause them to be slideable in parallel paths, said support comprising a bearing rail free from means capable of retaining liquid, said rail being provided with surfaces forming a groove for receiving the lower edge of the inner door and with a bearing surface for the lower edge of the outer door contiguous to said groove and inclined to drain laterally into the groove any liquid collecting thereon, said groove being so positioned as to discharge collected liquid laterally into the case.

1,744,090 — MOUNTING FOR REFRIGERATING APPARATUS. William Wishart, Beloit, Wis., assignor to National Refrigeration Corporation, Beloit, Wis., a Corporation of Delaware. Filed Dec. 10, 1926. Serial No. 153,802. 6 Claims. (Cl. 62—115.)



4. In a device of the class described, the combination of a compressor and driving means therefor, a mount for said compressor and driving means, a plurality of springs, a spherical member attached to each end of each spring, a support provided with bearing means adapted to co-operate with the spherical member on one end of each of the springs and bearing means on said mount adapted to co-operate with the spherical members on the other ends of the springs whereby the mount is suspended by the springs.

1,744,287 — REFRIGERATING APPARATUS. Raymond W. Tibbets, Methuen, Mass., assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 25, 1928. Serial No. 256,991. 3 Claims. (Cl. 62—115.)



1. In a refrigerating system having a liquid refrigerant reservoir, a fitting provided with valve conduits extending to different levels in said reservoir.

1,744,468 — APPARATUS AND METHOD FOR COOLING CARGO SPACE IN SHIPS. Walter Lawrence Green, Jr., Hollis, N. Y., assignor to Luckenbach Steamship Company, Incorporated, New York, N. Y., a Corporation of Delaware. Filed Mar. 23, 1926. Serial No. 36,744. 3 Claims. (Cl. 114—211.)

1. Apparatus for cooling cargo space on a ship provided with a propeller shaft alley and a cargo space, comprising means for admitting fresh air to the shaft alley, an enclosed air duct located in said shaft alley, means for drawing said air through the shaft alley and into the said enclosed duct, means for cooling and drying said air within said air duct, a normally open water-tight valve connecting said enclosed duct with the cargo space to be cooled.

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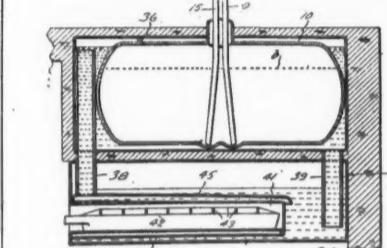
1,744,839 — REFRIGERATOR-CAR CONSTRUCTION. Chester A. Richardson, San Francisco, Calif. Original application filed July 1, 1926, Serial No. 119,856. Divided and this application filed May 21, 1927. Serial No. 193,339. 4 Claims. (Cl. 62—24.)

1,744,866 — DISPENSING CABINET. Ernest L. Condon, Dorchester, Boston, Mass., assignor to United American Soda Fountain Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 26, 1928. Serial No. 315,258. 6 Claims. (Cl. 312—114.)

3. A supporting bracket for mounting a display case on a counter slab comprising a trunk, upper and lower portions projecting from said trunk over and under the edge of the slab respectively, and a portion projecting from said trunk in the opposite direction for supporting the case.

6. A cabinet having a longitudinally extending opaque riser extending vertically therefrom, a counter mounted at the top of said riser and extending rearwardly therefrom over said cabinet, and a display case mounted at the rear of said counter and forming a continuation thereof.

1,744,968 — ONE-WAY HEAT INTERCHANGER FOR COOLING UNITS OF REFRIGERATION APPARATUS. David F. Keith, Cleveland Heights, Ohio, assignor to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 30, 1928. Serial No. 322,799. 15 Claims. (Cl. 62—118.)

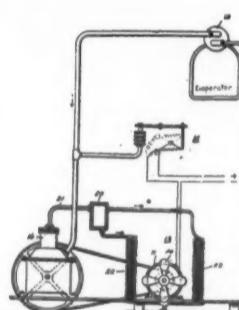


1. In combination with the cooling unit of a refrigeration apparatus and the space from which heat is abstracted thereby, an enclosure a part of whose interior constitutes a chamber, a body of liquid in the enclosure and wherein the aforesaid space is in intimate heat exchanging relation, said chamber being occupied by elastic fluid and the enclosure being so arranged with respect to the cooling unit that the fluid in said chamber is subjected to the temperature of the unit whereby when the volume of fluid in said chamber is caused to diminish by the low temperature of the unit the liquid will be elevated in said chamber into contact with the cooling unit.

1,744,969 — REFRIGERATING APPARATUS. Arthur J. Kercher, Berkeley, Calif. Filed Aug. 26, 1925. Serial No. 52,511. 14 Claims. (Cl. 62—116.)

1. A refrigerating apparatus comprising a closed casing, a stationary axial unit extending therethrough comprising a hollow member and a valve member, a motor and a compressor connected therewith supported on said unit, a cooling coil connected with said compressor and surrounding said casing, an expansion coil in communication with said cooling coil, a device responsive to pressure within said expansion coil, and a valve controlling the inlet of said expansion coil having a stem extending through said unit and connected with said pressure responsive device to be actuated thereby.

1,744,816 — REFRIGERATING APPARATUS. George M. Troup, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 18, 1926. Serial No. 149,111. 7 Claims. (Cl. 62—115.)



1. Refrigerating apparatus comprising a compressor, condensing means having two condensing passages in parallel circuit relation and discharging into a common space, one passage being arranged to permit the entrance of liquid thereto and the other being arranged to prevent the entrance of liquid thereto.

1. In a refrigerating system having a liquid refrigerant reservoir, a fitting provided with valve conduits extending to different levels in said reservoir.

1,744,468 — APPARATUS AND METHOD FOR COOLING CARGO SPACE IN SHIPS. Walter Lawrence Green, Jr., Hollis, N. Y., assignor to Luckenbach Steamship Company, Incorporated, New York, N. Y., a Corporation of Delaware. Filed Mar. 23, 1926. Serial No. 36,744. 3 Claims. (Cl. 114—211.)

1. Apparatus for cooling cargo space on a ship provided with a propeller shaft alley and a cargo space, comprising means for admitting fresh air to the shaft alley, an enclosed air duct located in said shaft alley, means for drawing said air through the shaft alley and into the said enclosed duct, means for cooling and drying said air within said air duct, a normally open water-tight valve connecting said enclosed duct with the cargo space to be cooled.

## G. E. OFFERS AMMONIA EMERGENCY STOP SWITCH

THE General Electric Company announces an emergency stop switch, designated SY-109-B, for use in butcher shops, ice cream parlors, delicatessen stores and other places using ammonia compressors for refrigeration. The switch is especially designed for use in New York City and other municipalities where it is required that such installations be equipped with an emergency device, externally located, for shutting down the compressor motor in any emergency which might result in the leakage of ammonia fumes.

The switch has a glass cover and is provided with a small hammer on a chain. The glass cover holds one set of switch contacts in a closed position. The equipment which this switch would control would be started and stopped by means of a magnetic switch. The contacts of the emergency switch would be wired in series with the "stop" button of the magnetic control. Breaking the glass of the emergency switch would allow the normally closed contacts to open and thus stop the motor. The enclosing case of the switch is finished in bright red.

The new switch has an additional set of contacts which close when the glass is broken. The advantage of closing one circuit while the other is opened is the possibility thus afforded of lighting or sounding a warning signal at some remote point such as the fire station whence apparatus could be sent to the scene of the trouble.

### KELVINATOR EQUIPS NEW BIRMINGHAM STORE

THE new Birmingham, Ala., store of the Atlantic & Pacific Tea Co., 1030 S. 20th St., which was recently opened to the public, is equipped with two Warren top display cases, one 10 ft. and one 12 ft.; an 8 ft. by 10 ft. by 10 ft. meat cooler and a 7 ft. by 9 ft. grocery box. All of this equipment is cooled by three Kelvinator compressors.

The Birmingham store is the fifteenth opened by the Atlantic & Pacific Tea Co. during the past four or five months. All of them have been equipped with Warren cases and coolers and Kelvinator refrigerating units.

### ELECTRIC SHOP APPOINTED FRIGIDAIRE DISTRIBUTOR

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